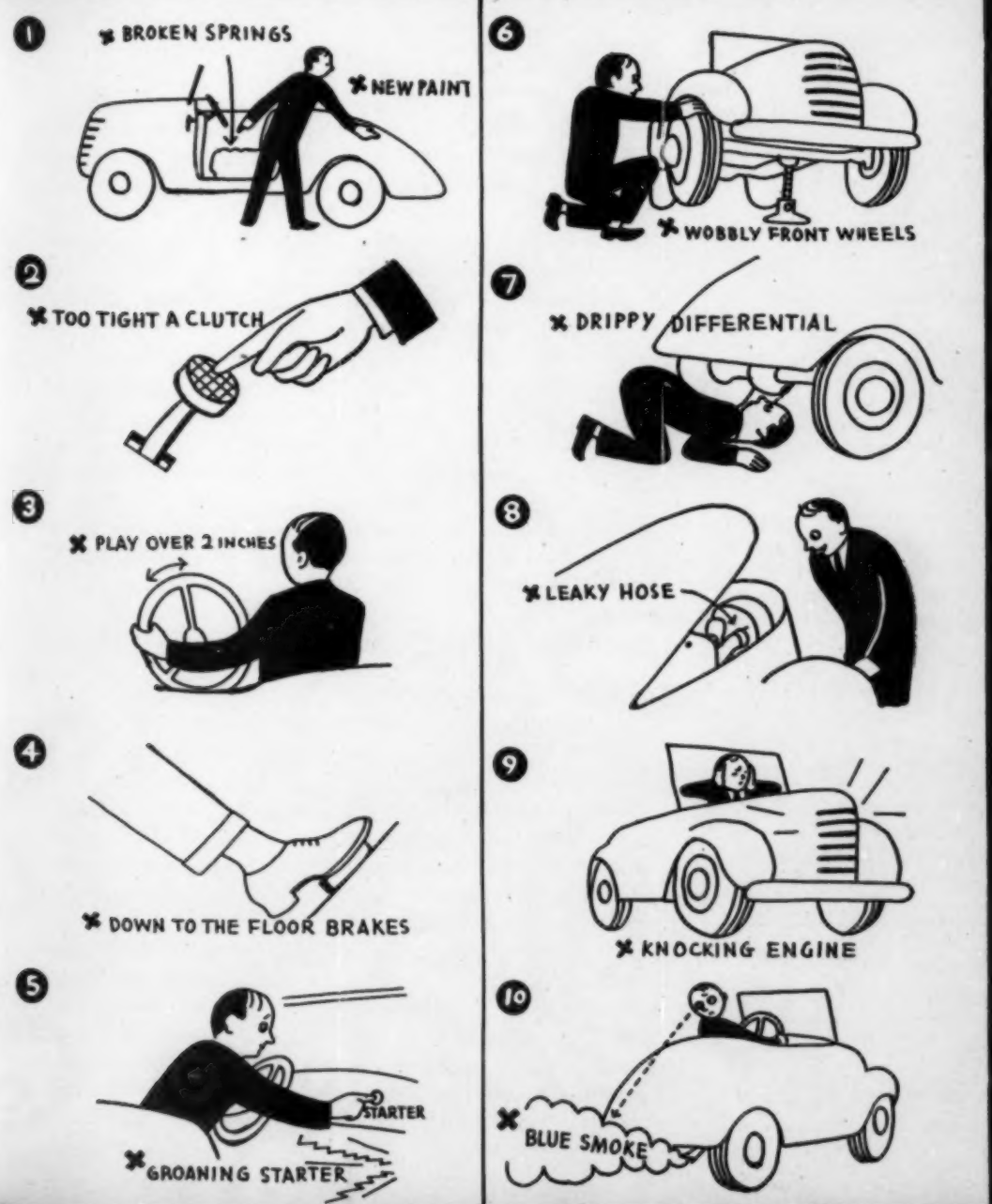
Consumers Union REPORTS

VOL. 7, NO. 2 FEBRUARY 1942

If you're one of the favored few—this issue rates the new 1942 models

If you're making your present car last—this issue tells what to do

If you're buying a used car—here are some tests to make (more inside)



AUTOS: NEW & USED

RADIO PHONOGRAPHS with FM

RECORD CHANGERS

HOUSEHOLD OILS

CARE & REPAIR

Beginning a New Department

HOW TO MAKE OUT YOUR TAX RETURN

IN THIS ISSUE

The purposes of Consumers Union, as stated in its charter, are "to obtain and provide for consumers information and counsel on consumer goods and services . . . to give information and assistance on all matters relating to the expenditure of earnings and the family income . . . to initiate and to cooperate with individual and group efforts seeking to create and maintain decent living standards for consumers."

TECHNICAL SECTION

NEWS AND INFORMATION

Cover by B. Togawa

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CORRESPONDENCE should be addressed to Consumers Union, 17 Union Square, New York City. CU regrets that time does not permit answers to inquiries for special information.

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War Paint

CAUSE for speculation over what's in store for the American woman is provided by a news squib from London. It seems that some enterprising Britishers, undaunted by shortages of cosmetic ingredients, are utilizing unglamorous materials to turn out what the United Press terms "rubbish likely to ruin the skin of the user for life."

The news item recounts the experiences of a reporter who took a job in one of the "fake factories." He discovered that a mixture of beeswax, borax, paraffin and water was put into a churn geared to different speeds. When the churn went at high speed, a hair fixative was the result; at medium speed, out came a face cream. And low speed produced—with a dash of brown dye—a leg tan.

Then, according to the report, the products were put into "elaborate" boxes and sold at fancy prices.

The London journalist and the UP reported these shady doings in a way suggestive of a debutante relating her first experience with the seamy side of life. Particularly disturbing to the curious reporter were the ingredients used. CU, an older hand at these matters, can't get upset about that part of the "fraud."

For there's nothing about beeswax, borax, paraffin or water which would ruin a normal person's skin. In fact, requirements for the average cosmetic being what they are—and they're not very exacting—these ingredients should serve the purpose about as well as fancier materials. As for the multiple-speed churn, it sounds just a little on the fantastic side; more likely they simply altered proportions.

As to the prices, it is nothing new for consumers to pay high prices for a concoction which costs a few pennies to make. But it is fraud at any time, war or no war.

And American women should keep that fact in mind when and if shortages of cosmetic ingredients occur in this country and substitutes are brought into wide use.

The high priced, "glamour" cosmetics never have had any real edge over the 5-&-10-cent store variety, except perhaps in giving off a more exotic smell. If the London scheme is transplanted to America, there won't be even that edge. If you like fancy boxes well enough to pay fancy prices for them, that's up to you. Otherwise, you'd better get ready to pay more attention to knowing what you're paying for than you ever have.

McNutt's Pantry: Forget It

TWO weeks after Pearl Harbor, Federal Security Administrator Paul V. McNutt brought into the world a full-blown food hoarding plan. It met a cold reception in Washington.

Last month, weeks after everyone had supposedly agreed to forget McNutt's *faux pas,* the situation took a dangerous turn when national grocery distributors began circularizing handbills urging people to stock up an emergency pantry shelf.

In case you passed up the newspaper item on the original "McNutt Pantry," here's what it said: Hoarding is unnecessary. All any family needs to keep in stock during wartime is a four-day food supply. Then followed a list of foods prepared by the Nutritional Division. For a family of four, this included items such as 16 cans of evaporated

milk, a pound of cocoa, 16 bars of chocolate, 4-5 pounds of canned meat and a variety of other items totaling 28.

To the discerning reader, it appeared that there was some little contradiction in Mr. McNutt's statements. "Don't hoard," on the one hand, and advice to buy a large amount of food for storage purposes, on the other hand, didn't seem to go together. And there were discerning readers in Washington offices.

That's where the situation stood up to a few weeks past. At which point grocery distributors began to take up what everyone had hoped was the forgotten "McNutt Pantry." One distributor urged laying in 64 different items—largely its own.

Now, before the cry goes any further, CU should like to step in with a word. We think McNutt pulled a boner, a very serious one. Under what circumstances it was done, how it slipped through without being caught, who gave him the idea, we don't know. But what the distributors who are crying "stock up" are doing in perpetrating McNutt's error cannot be called anything so gentle as a boner.

Urging the housewives to lay in large supplies of commodities which they don't immediately need and for which most of them can't afford to lay out large amounts of money is misleading and uneconomical advice.

Far worse, it's the sort of thing that fosters waves of hoarding, starts panic, draws surplus supplies of commodities away from sections where they are urgently needed.

Consumer Counsel Donald Montgomery of the Dep't of Agriculture and Deputy Director Dan West of OPA's Consumer Division brought this point out sharply in a joint statement. Said they: "If all the families of the nation were to follow the advice in this handbill, most of the foods listed would be completely off grocers' shelves and [would] go into dead storage, doing nobody any good." Not even the grocers, in the long run.

Victory (we hope)

Some of the biggest news for consumers yet to come out of Washington-at-war is announced just as we go to press: quality labeling of sheets and pillow cases will go along with new price ceilings on those products—both to take effect in March. If the advance announcements can be relied on, sheets will be grouped into four grades by thread count, and each sheet sold will carry an indication of its grade along with information on tensile strength, weight, sizing, hem width and stitching. By and large these specifications are just the ones that CU has always covered in its tests.

If true as reported, this represents a considerable step forward in the consumer's long campaign to make the machinery of distribution more efficient: now you can know what you're buying. It is also confirmation of a point that CU has made ever since price ceilings came in: a ceiling on price is meaningless without a floor on quality.

And so (the presses are waiting), all praise to Mr. Henderson and his Office of Price Administration for a much-needed pioneering job. We're checking now to see just how far the pioneering goes. And coming issues of our weekly *Bread & Butter* will cover the new development in detail—will also carry the sad word if the news turns out to be false. What we fear is that the labeling provisions may not apply at the retail end, since the ceilings don't. And if that turns out to be the case, consumers should get ready to fight.

TECHNICAL SECTION
OF CONSUMERS UNION REPORTS

Ratings of products represent the best judgment of staff technicians or of consultants—more than 200 specialists selected for competence and freedom from commercial bias—in university, governmental and private laboratories. Samples for test are in practically all cases obtained on the open market by CU's shoppers. Ratings are based on laboratory tests, carefully controlled use tests, the opinion of qualified authorities, the experience of a large number of persons, or on a combination of these factors. Most ratings of necessity reflect opinion as well as scientific data. For even with rigorous tests, interpretation of findings is often a matter on which expert opinion differs. It is Consumers Union's pledge that such opinions as enter into its evaluations shall be as competent, honest, and free from bias as it is possible to make them.

• "Best Buys" should give greater return per dollar although some products rated "Also Acceptable" may be of higher quality. Except where otherwise noted, a product rated "Not Acceptable" is judged to be of inferior quality or is considered to be potentially harmful.

If You're Buying A New Car

. . . this of all years you should buy for economy, long usage, easy servicing. To help you with a tough job, CU discusses 1942 models, gives comparisons and ratings

At THE time the Office of Production Management placed a ban on all sales of new automobiles, Consumers Union had ready for publication its annual auto report, with ratings, specifications and detailed information on all the new models. As a result of the ban, that report has gone the way of the OPM itself: dropped into the discard by the swift rush of history. Obviously, what members now need is not detailed data on new autos, which the great majority of consumers will not be able to buy, but information on choosing a used car and on making autos last longer.

Consequently, CU and its auto consultants have prepared a new report, and this is it. In three sections it covers: (1) for the few who will be able to get new autos, a summary of the major points regarding 1942 models, with statistical comparisons; (2) for those persons who intend to buy used cars, a guide to testing and buying; (3) for everyone who owns or drives a car, tips on caring for and operating an auto so as to conserve and extend its life.

THE 1942 MODELS

As CU pointed out in the preliminary auto report in the November issue, the 1942 autos have made no break with the past, despite soaring living costs and need for conserving production.

Generally, in size, luxury, inaccessibility and cost of operation, 1942 models carry on the familiar sales appeal of the big and gaudy package. Many models have huge fenders overlapping the doors, for which new $100,000 dies had to be created in a year of material and skilled labor shortages. Almost all have ornamental strips and plastics applied more aimlessly than ever.

The handful of cars produced after January 1, however, have been shorn of most of their glitter so that they are better looking. Though, of course, where paint has replaced plating on surfaces subject to wear, they may become shabby.

With production scheduled to stop the last of January, now, more than ever before, is the time to select a car carefully and with an eye to durability and long usage. Concentrate, therefore, on transportation rather than on style values. Moreover, rising living costs, increased taxation and a scarcity of skilled repairmen make low initial, operating and servicing costs vital considerations.

Remember that the more power and weight you buy, the less economy you get. You can't have both. But even in normal times, 75% of motorists can satisfy their needs out of the "economy" and low-priced groups.

A special warning: CU believes that from now on the resale value of heavy, high powered cars will be low. After the war, technical advances, not to mention lowered living standards, are apt to make such cars obsolete and thereby reduce sharply their value in the used-car market.

SUBSTITUTIONS Considerable amounts of substitute materials have been used in the 1942 cars. But with a few exceptions, such as weak lead-base ornamental castings (instead of zinc-base), and plastics that sacrifice strength where it shouldn't be sacrificed, substitutions needn't cause alarm. Often the substitute is merely a heavier or more expensive material. Often new techniques have been pressed into service a little sooner than they normally would be.

The most publicized substitution is iron for aluminum pistons. Iron wears as well or better, but normally is a less efficient material for this use. Though *Ford, Chevrolet* and *Pontiac* have for many years used iron or cast steel pistons, their inclusion in other cars has necessitated considerable readjustments. For example, engines have had to be protected from the forces set up by the 42% to 84% greater weight.

Whatever troubles occur with the new pistons will arise chiefly from the higher oil temperatures to be expected with iron at high speeds and from the fact that the *designs* are new and unproven, rather than the material.

At this point substitutes have about reached the limit. Unless chromium or nickel is used in exhaust valves, the valves simply won't stand up under the intense heat. And there is no substitute in sight for brass and copper radiator cores (including hot water heater cores). Some ignition and electric parts require very critical materials, but in small amounts.

If more new cars are produced, these are the points to scrutinize for inferior "ersatz" construction.

BODIES Except for the enclosed running boards which are used on nearly all the 1942 models, body construction of autos in the moderate price field has not been altered this season. The same is not true of the exteriors, which have been adorned with new and superfluous trim, adding much to weight and upkeep and nothing to transportation value.

In selecting a car, do not forget that all makes except three (*Willys, Studebaker Champion, Plymouth*) offer lower-priced bodies on higher-priced cars—a *Chevrolet* body on a *Pontiac, Olds* or *Buick* chassis, for example. A larger and higher-priced car is, of course, more expensive to buy and operate; but you can make some savings by getting it with the low-priced body (instead of the

regular body)—provided a few inches less room isn't objectionable to you.

MECHANICAL CHANGES For 1942, major mechanical changes have been few. Brake areas have been enlarged (a year or two late) to meet increased weight. In most cases front brakes have additional power, making for quicker and straighter stops but increasing the likelihood of locking front wheels (and inadequate steering control) on slippery roads or with smooth front tires.

The *Ford 6* engine, which made its appearance in passenger cars during 1941, outpulls and outaccelerates the V-8 engine at moderate speeds and gives better gas mileage. The 1942 *Plymouth* has a bigger, slower-running engine, designed for pulling power rather than high maximum speed. *Chevrolet* engines have always been of the pulling-power rather than the high-top-speed type. Since most buyers want—or at least have most use for—cars offering good pulling power per dollar rather than fast sports models, this new trend is a considerable improvement.

In spite of iron pistons, some 1942 cars feature higher compression ratios. Apparently manufacturers anticipated an increase in gasoline octane numbers (increased anti-knock) instead of the decrease on which eastern and midwestern refiners have agreed. With higher compression ratios, severe knocking in carboned-up engines can be expected. The only remedy is to retard the spark, or to avoid opening the throttle to the knocking point. Or, of course, to buy premium-priced fuels, if available.

A considerable number of four-speed transmissions, or overdrives, and optional axle ratios were originally available on 1942 models. Buyers now will have to take what they can get; but any car with an overdrive is a find, if it's otherwise satisfactory. Ordinary overdrives were optional on *Hudson, Lincoln-Zephyr, Nash, Packard, Studebaker, Willys.*

For drivers whose annual mileage is normally high and not concentrated on city driving, the very complicated *Olds* Hydramatic is acceptable, as is the *De-Soto-Chrysler* four-speed transmission. Other "drives" and clutch-operating mechanisms which don't produce operating economy via a fourth speed or axle ratio are not good buys.

As regards gas economy, cars cannot depart far from their Gas Consumption Factor (see Statistical Table, page 34), despite individual differences in efficiency. The factor depends on engine revolutions per mile and engine piston displacement. For a given factor, a car with small piston displacement is usually more economical in city or "stop-and-go" driving, while a car with low engine rpm frequently shows up better on the open road.

PRICES The average price increase for 1942 over 1941 (December price lists) is about $140. Deducting the Federal excise tax put on last November makes the net boost a rough $100. Some of this can be charged to the use of more expensive substitutes and to added costs per unit resulting from curtailed produc-

1942 ECONOMY CARS

. . . give you most transportation value for your money. Willys Americar (bottom) is cheapest to run; Nash Ambassador (center) has roomiest body; Studebaker Champion (top) is best all-round buy

A Statistical Comparison of the 1942 Automobiles

CARS are arranged within each group in estimated order of all-round value and usefulness.

Minimum overall length (Col. 1) is important in relation to easy parking, maneuvering, and garaging. Taxable horsepower (Col. 2) bears no relation to actual HP, is used in some States as a basis for determining license fees, as is shipping weight (Col. 3).

Low weight generally favors good performance and economy. Tire capacity (Col. 4) is the passenger or pay load, in pounds per four tires, which can be carried without risk of excessive wear or damage to the tires. This figure is arrived at by deducting ready-to-run car weight (Col. 3 plus 150 lbs.) from total tire capacity (furnished by the Tire & Rim Ass'n). Tire life is shortened in proportion to overload.

Gear ratio (Col. 5) expresses the number of engine revolutions (in high) for each revolution of the rear wheels. Small ratios favor quiet, economy, longer life. Power ranking (Col. 6) is based on maximum torque, gear ratio, tire size, weight. The first car in each group has greatest high gear pulling power, in proportion to its weight.

Compression ratio (Col. 7) indicates the extent to which the gas mixture is compressed before firing. A high ratio favors efficiency. Piston displacement (Col. 8) is the "lung capacity" of the engine, a low figure is favorable for economy. Engine revolutions per mile (Col. 9) should generally be low for economy, quiet, long life. The gas consumption factor (Col. 10) or gas mixture used per mile, should be low for economy; it is the mathematical product of Cols. 8 and 9. Low brake loading (Col. 11) favors long brake lining life; it represents the pounds of loaded car per square inch of lining area.

Prices (Col. 12) are delivered-at-factory prices prevailing in December and include spare tire and tube.

MAKE AND MODEL	OVER-ALL LENGTH (IN.)	TAX-ABLE HORSE-POWER	SHIP-PING WT. (LB.)	TIRE CA-PACITY (LB.)	GEAR RATIO (to 1)	POWER RANK-ING (IN GROUP)	COM-PRES-SION RATIO (to 1)	PISTON DIS-PLACE-MENT (CU. IN.)	ENGINE REVS. PER MILE	GAS MIX-TURE PER MILE (CU. FT.)	BRAKE LOAD-ING (LB. PER SQ. IN.)	FACTORY PRICE ($) 4-DOOR SEDAN)
	1	2	3	4	5	6	7	8	9	10	11	12
GROUP I: *Economy Cars (Top Price $968)*												
STUDEBAKER CUSTOM CHAMPION, 4G	193	26.35	2520	570	4.10	1	6.5	169.6	3157	155	28.4	870
Remarks: Lower engine speed for '42, better gas and oil mileage.												
WILLYS AMERICAR, 442	181	15.63	2295	795	4.44	4	6.48	134.2	3422	133	27.9	788 839 (DeLuxe)
Remarks: Cheapest car to run, easiest to work on. Poor riding. Dealer service scanty.												
NASH AMBASSADOR 600, 4240	196.5	23.44	2655	435	4.1	2	6.87	172.6	3153	158	25.5	968
Remarks: Unique features working out fairly well. Body roomiest in group, not easy to repair, Economy very good.												
HUDSON TRAVELLER 6, 20	198.25	21.6	2940	150	4.55	3	7.25	175	3390	172	28.4	945
Remarks: Best riding of group. Note weight, inadequate tires. DeLuxe model tires ok. Good features.												
GROUP II: *"Low Priced" Three (Top Price $944)*												
CHEVROLET STYLEMASTER	195.8	29.40	3160	350	4.11	1	6.5	216.5	3066	192	26.3	907
Remarks: Unchanged for '42. Durability good. Maintenance costs low. Gas mileage low for group. Ask about "economy" engine.												
FORD 6 DELUXE	194.34	26.14	3179	331	3.78	2	6.7	225.8	2820	184	25.6	933
Remarks: "Special" stripped model not recommended without track bar. "Six" is definitely preferable to V-8.												
PLYMOUTH DELUXE, Model P14	195.5	25.35	3060	450	3.9	3	6.80	217.8	2909	183	28.2	944
Remarks: More capable than previously. "Greenest" engine design of group. Good economy. Ask about economy equipment.												
FORD V-8 DELUXE	194.34	30.01	3200	310	3.78	4	6.2	221	2820	180	25.8	943
Remarks: Engine refined, less accessible. "Best Buy" only for extreme high speed driving.												
GROUP III: *Top Price $1129*												
PONTIAC TORPEDO 6, 25	204.5	30.4	3305	205	4.1	5	6.5	239.2	3059	212	27	1062
Remarks: Few '42 changes. Good service life. CHEVROLET body shell. Note tire overload.												
DODGE DELUXE 6, D19	201.5	25.35	3230	280	4.1	1	6.70	230.2	3059	204	27.2	1058
Remarks: Fluid drive recommended to get 3.9 axle ratio. Economy much better for '42. Note tire overload.												
PONTIAC TORPEDO 8, 27	204.5	33.8	3360	130	4.1	3	6.5	248.9	3059	220	27.4	1088
Remarks: Long engine life. Note tire overload. Economy only fair. CHEVROLET body shell.												
OLDSMOBILE SPECIAL 6, 66	204	29.4	3350	160	4.1	2	6.5	238.1	3071	212	27.2	1088
Remarks: Note tire overload. PONTIAC 8 preferable, unless this car has 4-speed transmission.												
HUDSON SUPER 6, 21	207.37	21.6	3080	430	4.11	4	6.5	212	3066	188	29.4	1129
Remarks: Limited repair service; other characteristics favorable. If high price were disregarded, car would get third place rating.												
GROUP IV: *Top Price $1167*												
STUDEBAKER COMMANDER, 12a	210.25	26.35	3265	525	4.09	5	6.5	226.2	3039	199	28.4	1128
Remarks: Reduced engine revolutions per mile for '42, increased economy, good vision and seating. Service network only fair. A "Best Buy."												
MERCURY V-8	200.6	32.51	3263	607	3.54	7	6.40	239	2577	178	26.3	1133
Remarks: Rated in this position chiefly because of good open road economy. Engine refinements. Price rather high.												
DESOTO 6, S10	207.53	28.36	3315	475	3.90	4	6.6	236.6	2878	197	27.7	1167
Remarks: Engine hard to get at. Other characteristics strike a good average, but price is rather high.												
OLDSMOBILE SPECIAL 8, 68	204	33.8	3455	415	3.9	2	6.5	257.1	2937	218	27.9	1130
Remarks: CHEVROLET body shell. Weight is high, with corresponding high power and below average in economy.												

MAKE AND MODEL	OVER-ALL LENGTH (IN.)	TAX-ABLE HORSE-POWER	SHIP-PING WT. (L.B.)	TIRE CA-PACITY (LB.)	GEAR RATIO (to 1)	POWER RANK-ING (IN GROUP)	COM-PRES-SION RATIO (to 1)	PISTON DIS-PLACE-MENT (CU. IN.)	ENGINE REVS. PER MILE	GAS MIX-TURE PER MILE (CU. FT.)	BRAKE LOAD-ING (LB. PER SQ. IN.)	FACTORY PRICE ($) 4-DOOR SEDAN)
	1	2	3	4	5	6	7	8	9	10	11	12
NASH AMBASSADOR 6, 4260	205.5	27.34	3335	455	4.1	1	6.5	234.8	2989	203	24.6	1134
Remarks: Powerful overhead valve engine. Good seating. Well established model. Service network small.												
PONTIAC STREAMLINER 6, 25	210.25	30.4	3415	635	4.3	6	6.5	239.2	3130	217	27.7	1118
Remarks: Heavier body than previously rated model, requiring larger, unfavorable axle ratio.												
PONTIAC STREAMLINER 8, 28	210.25	33.8	3515	535	4.3	3	6.5	248.9	3130	225	28.4	1144
Remarks: Same comment as for PONTIAC 6 above.												
GROUP V: *Top Price $1211*												
BUICK SPECIAL, 40 A	201.8	30.63	3650	220	4.1	4	6.0	248	3057	219	29.3	1171
Remarks: CHEVROLET body shell. If bought with compound carburetion, retain this compression. Heavy but rugged. Note tire overload.												
OLDSMOBILE DYNAMIC 6, 76	212	29.4	3465	405	4.3	1	6.5	238.1	3242	223	27.9	1153
Remarks: Heavy body requires unfavorable axle ratio. Car in Group III is a better buy.												
OLDSMOBILE DYNAMIC 8, 78	212	33.8	3580	470	4.3	3	6.5	257.1	3141	234	25.3	1196
Remarks: Same comment as for OLDSMOBILE 6 above. Car in Group IV is a much better buy.												
NASH AMBASSADOR 8, 4280	205.5	31.25	3485	565	4.1	2	6.0	260.8	2940	222	25.5	1184
Remarks: NASH 6 (Group IV) has same chassis, more power, and is a better investment.												
HUDSON COMMODORE 6, 22	207.4	21.6	3145	645	4.11	5	6.5	212	3033	186	29.3	1211
Remarks: Practically a deluxe edition of the Super 6 (Group III), which is a better investment.												
GROUP VI: *Top Price $1286*												
STUDEBAKER PRESIDENT 8, 8C	215.75	30	3485	745	4.09	3	6.5	250.4	2973	216	26.5	1262
Remarks: Note high tire capacity, good brake factor. Lower rpm per mile for '42. Good vision, good roadability. "Best Buy" despite limited repair service.												
CHRYSLER ROYAL 6, C34	207.75	28.36	3500	290	3.9	4	6.8	250.6	2870	208	28.9	1244
Remarks: Inadequate tires. Not very accessible. Other characteristics favorable. Good economy for group.												
PACKARD CLIPPER 6, 2000	208.5	29.4	3435	435	4.3	2	6.71	245.3	3229	229	26.8	1286
Remarks: Low body, wide seats. Note high engine speed. Simple design. Economy fair.												
BUICK SPECIAL 40B, (Extra Special)	207.5	30.63	3785	265	4.1	5	6.3	———	2965	213	30.1	1229
Remarks: Compound carburetion, low (6 to 1) compression recommended. Heavy 1941 "bugs" practically eliminated. Note tire overload.												
HUDSON COMMODORE 8, 24	207.37	28.8	3280	510	4.11	1	6.5	254	3033	223	30.3	1254
Remarks: Lightweight. Good service if not abused. Fair to good economy. Unique features. Scanty dealer service makes rating low.												
GROUP VII: *Top Price $1391*												
PACKARD CLIPPER 8, 2001	208.5	33.8	3560	310	4.1	1	6.85	282	3079	251	26.6	1341
Remarks: Same chassis and body as CLIPPER 6. Very good riding. Fair economy.												
OLDSMOBILE 8, 98	216	33.8	3705	525	4.3	3	6.5	257.1	3109	231	26	1376
Remarks: Larger car than last year. Cheaper OLDSMOBILES have better characteristics. With hydramatic, a good luxury value, however.												
BUICK 50 SUPER	212.31	30.63	3890	160	4.4	2	6.3	248	3190	229	30.8	1391
Remarks: Inadequate tires, heavy, high engine speed. Requires ethyl gas. "Not Acceptable."												
GROUP VIII: *Top Price $1485*												
BUICK CENTURY 60	212.25	37.81	4065	165	3.9	1	6.7	320.2	2814	261	24.5	1465
Remarks: Excessive power. Note tire overload. Useful only for hard, long distance travel. Operation very costly.												
CHRYSLER SARATOGA 8, C36	213.75	33.80	3880	350	3.91	2	6.8	323.5	2830	265	25.8	1485
Remarks: Same type car as BUICK 60. If purchased with 4-speed transmission, it is a better buy.												
HUDSON COM. CUSTOM 8, 27	214.37	28.8	3395	475	4.11	3	6.5	254	2992	220	31.1	1467
Remarks: Extra leg room, luxury as against HUDSON 8 (Group VI) which is better buy. Reasonably good economy.												
GROUP IX: *Top Price $1795*												
CADILLAC 61	214.6	39.2	4115	115	3.77	4	7.25	346	2748	275	24.7	1647
Remarks: Requires premium gas. Excellent engine. Same body shell as OLDS Dynamic, etc. Recommended originally with economy axle, but hydramatic acceptable. Note tire overload.												
PACKARD SUPER 8, 160	215.5	39.2	4005	225	3.92	1	6.85	356	2830	292	24.25	1739
Remarks: Same body shell as PACKARD 6. Overpowered. Economy poor. With overdrive it replaces CADILLAC as "Best Buy." Note tire overload												
LINCOLN ZEPHYR	217	41.42	3920	310	4.22	not published	7.00	305	3076	271	27.2	1795
Remarks: Excellent seating and vision. Larger engine for '42. Suspension improved, but still below group level.												
CADILLAC 62	219.6	39.2	4080	150	3.77	3	7.25	346	2748	275	24.4	1754
Remarks: Four-window "torpedo" body, otherwise similar to model 61, above. Same comment applies. Note tire overload.												
BUICK ROADMASTER 70	217.12	37.81	4150	80	4.1	2	6.7	320.2	2941	272	24.9	1601
Remarks: Four-window body, otherwise similar to model 60 (Group VIII) which is a better buy. Note tire overload.												

tion. The price situation for the future, as well as prospects for depreciation (trade-in value) are cloudy at best.

Remember: in buying any new car, don't fail to scrutinize the bill of sale for all items over and above the list price, and get a satisfactory explanation of them. Freight alone to the New York area, as an example, varies between $40 and $50—not more—according to car weight and distance shipped. In buying any car on time, read all the small print in conditional sales contracts, especially that concerning the terms of repossession by the finance company. And analyze the finance charge to the bone.

If You're Buying A Used Car

. . . the tests outlined can help you greatly in finding a good one

USED cars, the only cars currently obtainable by anyone, are in a strong seller's market. This means that prices will be bid up according to demand until the Office of Price Administration steps in and sets ceilings. Even then, prices will be stabilized at a level which will provide a real dealer profit (in past years most new-car dealers lost money on their used cars, subsidizing themselves out of their new-car profit margin).

In such a seller's market less attempt will be made to recondition used cars before they are put up for sale. And there is a growing scarcity of skilled repairmen so that their work commands higher prices. All in all, the car buyer not only will be forced to pay a higher price for a car even less adequately reconditioned than usual, but will also have to pay heavily for whatever repairs are necessary after he becomes the owner.

And there is the problem of parts. Deliveries on parts for older car models were very slow even before the present emergency tightened into war.

Used car buyers can make the best of the situation by following these steps:

(1) Stick to the simpler models—Sixes instead of Eights, for example—which need least tinkering to keep running. Pick out the easiest cars to work on.

(2) Favor lower-priced newer cars as against older models now depreciated to the price you want to pay. Parts for smaller cars will be easier to get, cheaper to pay for and install; and operating economy of the small cars is better.

(3) Take as much time to select a car as you can. Any used car that can pass all the tests outlined below will give good service.

Making these tests is the best way to know whether you're getting a good buy. You probably won't be able to carry out all the tests suggested, but make as many as your time and patience (and the dealer) will allow.

Used cars are sold either "as is" or reconditioned. An honest dealer will be glad to show you the record of all reconditioning work done, and should be willing to guarantee the car in writing for a stated period, or to share the cost of repairs over the period.

The reputation of the dealer from whom you buy is important to you, and worth investigation. Buy preferably from a dealer in your own neighborhood, where the kind of deal you get can influence his reputation. Identify the car you're interested in by motor number and year of manufacture in the National Automobile Dealers Ass'n's catalog or other trade book. (The dealer should have a copy; if he won't show it to you, walk out.) Cars built late in a model year are apt to be better buys.

All-out testing of a used car involves considerable time and diagnostic skill. If you have a mechanic who is able and trustworthy, his help will be worth paying for, particularly if he can supply a vacuum gauge and a mileage tester. If this isn't practical, and you feel that you can't make thorough tests yourself, get help from an expert motorist.

EASY TESTS FOR THE USED CAR LOT

1. Look the car over outdoors in bright light, not in a garage. Inspect the body for dents that have been filled in, for new fenders, running boards or bumpers—all signs that the car has been damaged. Regard any mileage on the speedometer as the *minimum*, not maximum, distance the car has traveled. See if floor mats and pedals indicate hard wear; if they've been replaced, the car has had plenty of usage. Feel the upholstery for sharp ends of broken springs.

Cars with their original paint have generally had less use than the same models, repainted. Inspection should reveal whether tires have been regrooved (adding nothing to their life), recapped (new rubber on tread only) or retreaded (new rubber on tread and shoulders).

2. Push the clutch pedal with one finger; there should be an inch of free play. If not, the clutch has been abused. (Of course, the pedal may have been reset, so this is a test for bad condition, not a guarantee.)

Test the steering wheel for play. Over two inches of rim travel is excessive; the car won't steer well. And adjustment isn't always possible.

Sit behind the wheel and apply the brakes, hard. Two inches should remain between foot and floor for a safe braking margin. Hold the pedal down two minutes (if hydraulic); if the pedal sinks down slowly, the system leaks and will be costly to repair.

With the ignition switch off, press the starter switch briefly 8 or 10 times. Worn or broken teeth will clash or grind. Remember: installing a new starter ring gear is quite a job.

3. Have *one* front wheel jacked up, if possible (if not, make the test with the wheel on the floor). Face the wheel, grasp the top firmly and shake it to and from you while someone holds the foot brake on. Looseness in kingpins or knee-action joints can be heard or felt; loose kingpins cause fast tire wear. So do out-of-line front wheels, but you will have to test for this by driving over a floor-pan gauge, such as are found in most tune-up shops or service garages.

4. Look inside rear wheels, and at front of differential for heavy oil stains or leakage from worn oil seals. Oil-washed areas on the bottom of the clutch housing or at front of crankcase indicate loose seals, with probable high oil consumption.

Open the hood: look for water leaks—dusty or rusty stains or brown froth—at radiator, water pumps and elsewhere. If the fan belt has been renewed, mileage is probably above 30,000 miles. If the belt is worn on one side, pulleys are out of line. Pull out the dipstick; should the oil appear heavier than cool SAE 30 oil, call off all engine tests.

Look at battery connections for corrosion, and at the condition of the container itself. (And make sure you get the same battery you checked, if you eventually buy the car.)

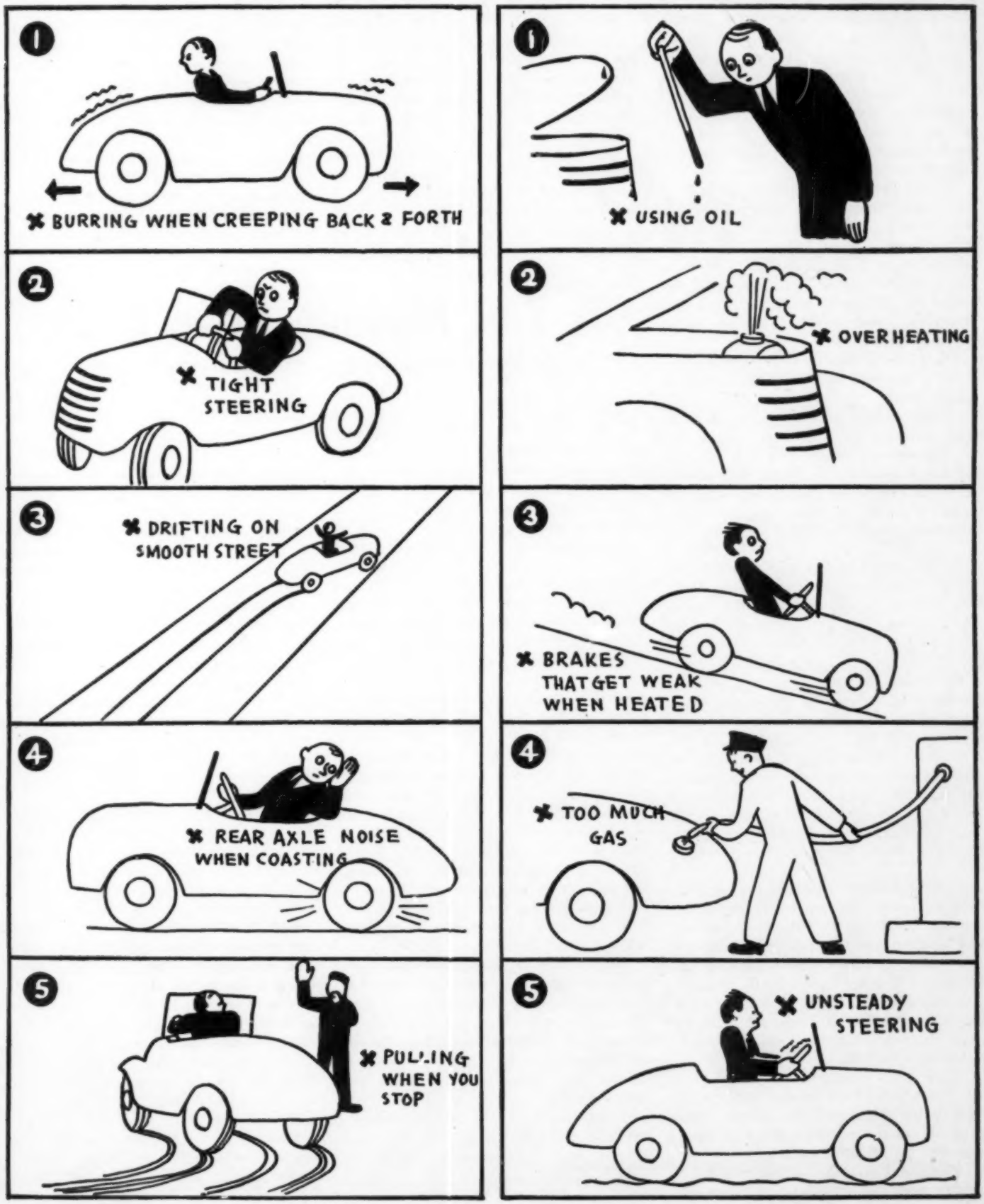
5. Start the engine and let it warm up. Clicks or intermittent knocks are a bad sign. When the engine is warm, get in, put the gears in high, set hand brake hard, gradually open the throttle and let back the clutch. The clutch shouldn't slip and the engine should stall as soon as clutch is fully let back. If this isn't the case, reject the car. While someone races the engine hard several times, watch for blue oil smoke (sign of worn rings) at the exhaust.

ROUND-THE-BLOCK TESTS

1. Set the car moving forward, then backward, by letting back the clutch gently. Repeat several times. If clutch is worn it will engage with a jerk; if

Before You Buy a Used Car

. . . here are some defects to look for. The tests in column 1 can be made on a round-the-block run. The tests in column 2 require a road trip. See front cover for other tests. See text for details.



warped, there will be chatter and vibration. Looseness in universal joints, &c., will also show up on this test.

2. Put 40 pounds of air in all tires and remove the rear seat cushion. To check for unsafe sticking in the steering gear, the result of improper adustment, turn corners sharply in both directions. On a level surface with no cross wind, the car should travel a block without drifting to the edge of the road. If it drifts or pulls persistently toward one side, something is out of line. Do not accept the car until it is corrected.

Watch the car as it is driven toward you and away from you. Wobbling wheels will cause rapid tire wear. If the rear wheels do not follow in the track of the front ones, frame or axles are out of line. Reject the car. Stop with one wheel on the curb, open and close all doors to reveal weak or broken frame or body parts.

On a quiet, smooth street listen carefully to the rear axle while (a) accelerating gently, (b) slowing down with foot off accelerator, and (c) coasting with gears in neutral. There should be no pronounced hum or grind. If the car has a hypoid axle (front part of differential case lower than center of axle), reject the car if there is any noise whatever.

3. Make several quick stops while going 20 mph. The car should stop without swerving; otherwise, brakes need equalization. (Do not accept the car on a promise to adjust them later; insist on "straight stops" before you buy.)

At about 12 mph, apply the brakes, maintaining speed by pressing down the accelerator. Do not stall the car with brakes until the accelerator is all the way down. Disregard "pinging" noises from engine and listen for hollow knocking from bearings, all of which should be of same loudness unless some bearings are loose. One or more very loose bearings should be cause for rejection.

4. With brakes, slow the car in high to 3 mph, then release brake and open throttle halfway. If valves, carburetor and ignition are in good order, the car will gain speed without bucking or skipping. If a fairly steep hill is available, climb at 12 mph in high, then open the throttle. The car should pull on smoothly, but will buck if valves or ignition are in bad shape.

5. Accelerate from a standstill to 15 mph in low gear with the throttle wide open. Worn transmission gears or bearings will groan and howl.

Drive along a rough street; the overinflated tires (40 pounds) will bring out rattles, squeaks and body looseness, or, if the spring shackles have been drawn up tight to stop rattles, will cause a choppy ride.

FINAL ROAD TESTS

Before taking the car out for a distance trial (at least 50 miles, if possible) reduce tires to proper pressure and make sure that you have jack, tire tools and inflated spare. Before you start, scratch the dipstick at the exact oil level, or measure the level carefully with a rule. After the drive, return to exactly the same spot to recheck it. The level should not go down more than one-quarter inch in 50 miles.

When the car has been driven some distance, test for water leaks and overheating. If there is a long hill which you can go down, see if the brakes will maintain their power when hot. Inferior or shimmed-up brake linings will let the pedal sink rapidly toward the floor.

Test the road-holding ability of the car at good speed over a rough road. Repeated diving or swerving usually indicates shock absorber trouble or badly out-of-line front suspension. Reject the car if it does not handle safely. If you select roads which you customarily travel, your driving test will be more valuable in revealing additional defects.

Gasoline mileage cannot readily be checked unless you start with a full tank, and refill afterward, or have the use of a tenth-gallon or other mileage tester (your mechanic may have one).

If You Already Have A Car

. . . you'd better concentrate on conserving its life. Here's how

EVERY part of your car had a certain length of life designed and built into it—as long a life as the cost of the part would permit. Consequently, the only way to make your car last a long time is to use up its built-in life as slowly as possible.

This calls for conservation on several fronts: the enemies of your car are oxidation, rust and corrosion as well as friction, heat and wear. Better include yourself in that list, too; your driving habits shorten your car's life more than you suspect.[1]

ENGINE Begin by conserving the engine, together with all the parts that transmit its power to the road surface. *The life of these units is proportional to the amount of power they are called upon to transmit.* Therefore, to save your power-plant, drive with a light foot on the accelerator at all times, so that you use less horsepower. Since human nature is weak, voluntarily decreasing the amount of horsepower used takes a lot of will power—too much for most of us. Having a reminder present may help.

With a little ingenuity, you can put a short spring under the accelerator, or hook one to the carburetor operating linkage, so that extra pressure will be required to push the accelerator beyond the halfway point. This will serve to remind you when economy begins to disappear.

If you want to go all-out for economy, you can use a more drastic check—a throttle stop. To improvise one, press the accelerator about half way down and measure the distance from it to the floor board. Cut two small blocks of wood—about 1 in. by 2 in.—to correspond to this thickness, notch them to fit around the throttle rod that goes through the floor, and fasten in position. The thickness will be about right if you can still reach 55 or 60 mph on a level road.

Though the throttle stop is an effective check, it can also be dangerous unless you constantly keep in mind that the speed of your car is limited. And, most important, don't let anyone else drive your car with a stop in place unless he knows about it, so that he can modify his driving habits safely. All in all, the spring mentioned above is a safer check on your speed.

CLUTCH AND BRAKES In order to start the car off without a jerk, the clutch is designed to slip and absorb, as frictional heat, some of the engine's power. The more slipping the clutch does, the more heat and wear. Consequently, never race the engine while slowly letting back the clutch. (In fact, never race the engine at any time; there is no worse abuse.)

The clutch pedal must be adjusted so as to maintain at least an inch of free travel before disengaging begins. Always drive with your left foot on the floor, not on the pedal. And hold the car on a hill with the brake, never with the clutch.

Brakes, too, convert energy (the car's momentum) into frictional heat. They wear in proportion to the amount of stopping they have to do. Bear in

[1] For additional information on economical driving see June 1941 *Reports*.

mind that all the energy they convert was supplied in the first place by burning gasoline—at your expense. Therefore, to save both fuel and wear, coast up to stops and corners with closed throttle. And try "raising your sights" as you drive—looking as far ahead as possible, so as to anticipate the need for slowing down.

GEARSHIFT Practice shifting at lower speeds, and with a slight pause in neutral on the way from low to second and from second to high. The synchronizer rings which allow you to shift without clashing into second and high are friction clutches whose function is to absorb the over- or under-speed of the gears. Easing the shift lever into gear decreases the load on the synchronizers.

TIRES Whatever you do about the rest of your car, you'll have to start conserving its tires, which are fast becoming collector's items. If you have a good spare, use it; shift five tires instead of four from wheel to wheel every 4,000 miles (see diagram). Tires deteriorate from lack of use, from hot sun, or from contact with oil.

With properly inflated tires (check them twice a week), tire wear, for the most part, is due to abrasion by the road surface—a first-class grindstone. If you put less power through the rear tires, they will last longer. The grindstone works fast on front tires if they are out of alignment; check for this frequently, and always after hard blows against curbs or other objects.

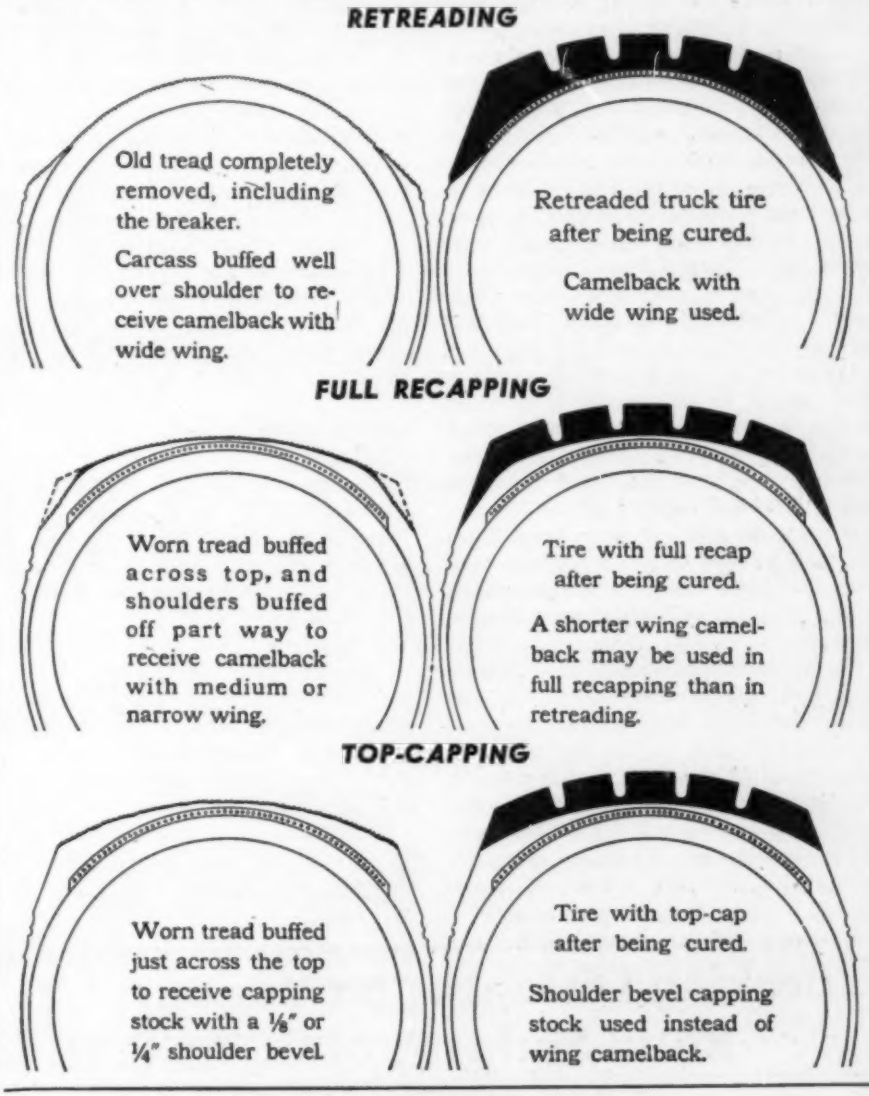
Drive slowly over rough roads, because as the tires deflect their speed against the road surface, changes and wear occur and bruises from stones and sharp edges result. Tires wear much faster on unsurfaced roads.

BATTERY Provided a battery is not overcharged by long-distance hot weather driving and does not reach a half-charged condition in Winter so that it freezes, its life depends pretty much on the number of cycles of discharging and recharging that take place. Keeping spark plugs, choke and wiring (especially between battery and coil) in condition for a quick start therefore lessens battery wear.

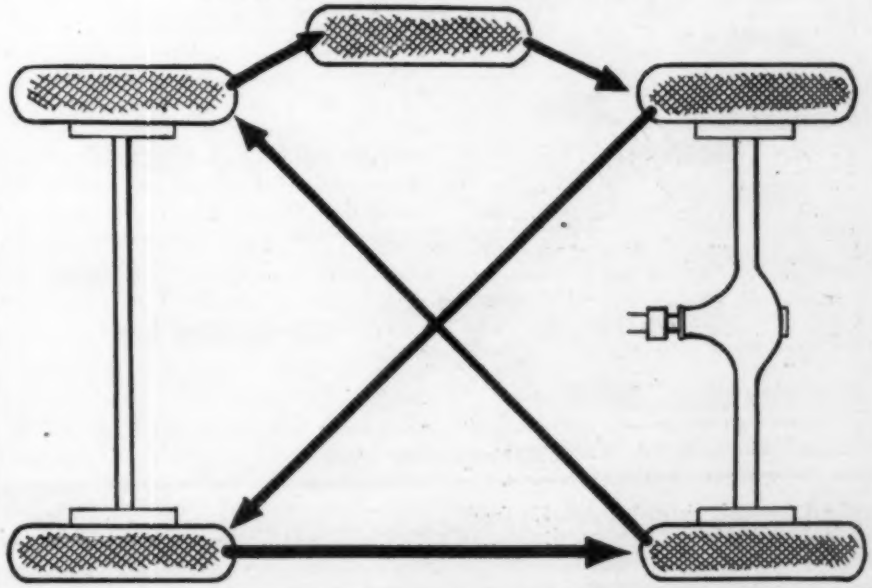
If your car doesn't start after a few seconds of starter-pushing, investigate; don't keep on worrying the starter until the battery finally runs down. Keep the ground strap tight, and the battery terminals free of corrosion by washing with an alkaline solution.

If your car stands idle for long periods and then is used only for short neighborhood runs, you may find it difficult to keep the battery fully charged.

You Can Have These Things Done to Your Tires



How to Switch Your Tires



A portable charger, operating from any electric outlet, will provide the necessary extra charge. You might try to interest your neighbors in buying and operating a charger collectively.

ENGINE ACCESSORIES Seasonal reverse flushing (of radiator and cylinder block separately) with washing soda or a commercial flushing compound is about as much as an owner can do towards conserving his car's cooling system. Even distilled water will cause some corrosion. Hard water should be avoided, even if used with water "softener." Corrosion-inhibiting solutions are helpful.

Corrosion is accelerated by leakage of air into the water through loose hoses, cracks, and at the water pump; therefore make sure all joints are tight. Either too tight or too loose fan belts cause abnormal wear. If the tension is correct, the belt can be pushed down one inch midway between pulleys. And remember: your radiator, like everything else in your car, will last longer at moderate driving speeds.

Clean, unchafed wiring, and electric units with bright, tight connections conserve electric current and last longer. Keep spark plug porcelains and distributor cap clean and dry, correct spark plug gaps only by bending the center electrode, and clean off deposits of hard carbon or oily soot. When the porcelain around the electrode cracks or chips off, or electrodes are eaten away badly, it is time to consider new plugs—not before. Don't over-oil the distributor or generator.

Periodically, clean all screens or filters in the gasoline lines. Don't let your gas get so low that you use the last inch or so in the tank; it's apt to be full of sediment. See that the carburetor is tight to its mounting on the manifold, and that the heat damper in the exhaust manifold moves freely against its spring pressure. Remove the air filter on top of the carburetor once in a while, wash in kerosene, douse in engine oil, drain and replace. Don't tighten the clamp too tight; it will bind the choke valve.

LUBRICATION Chassis lubrication every 1,000 miles is one of the best conservation steps you can take. But it's a hard and messy job to do yourself, and you—along with many filling stations—may not have the right lubricants. It's most important to insist that the job is not done in a hurry.

If your car has a hypoid axle, better let the car dealer take care of it; hypoid lubricants of various kinds don't mix. In any case, make sure that the specific lubrication instructions for your car are followed. Don't neglect locks, hinges and other body hardware.

If you keep your driving speed below 50 mph and if your engine isn't an oil pumper, you can use Winter grades of oil—SAE 10 or 20—in Summer with benefit. Otherwise, change in the Spring and Fall. For hardest Summer driving, follow the car manufacturer's instructions.

In Winter, warming up the engine carefully before driving will protect both oil and engine. For extreme driving conditions, which foster dilution, sludging and corrosion, change oil at least every 2,000 miles. And keep the radiator covered to maintain as high operating temperatures as possible.

EXTERIOR A wax finish is still probably the best way to protect the exterior of your car. Wax works best on clean, dry surfaces, free from traces of cleaner or polish. But more important from the standpoint of conservation than broad gleaming panels are well cared for edges, seams, joints and exposed under-surfaces of sheet metal. These and the exposed chassis are the points where rust and corrosion start.

Before waxing your car, go over it and fill joints where leakage may occur with rubber putty, and apply rust preventer along seams and metal joints. Or, more simply, paint such places liberally with liquid wax and let dry. Clean chromium surfaces with mild cleansing powder or soap and water and rub dry. Then wax all the surfaces of the car.

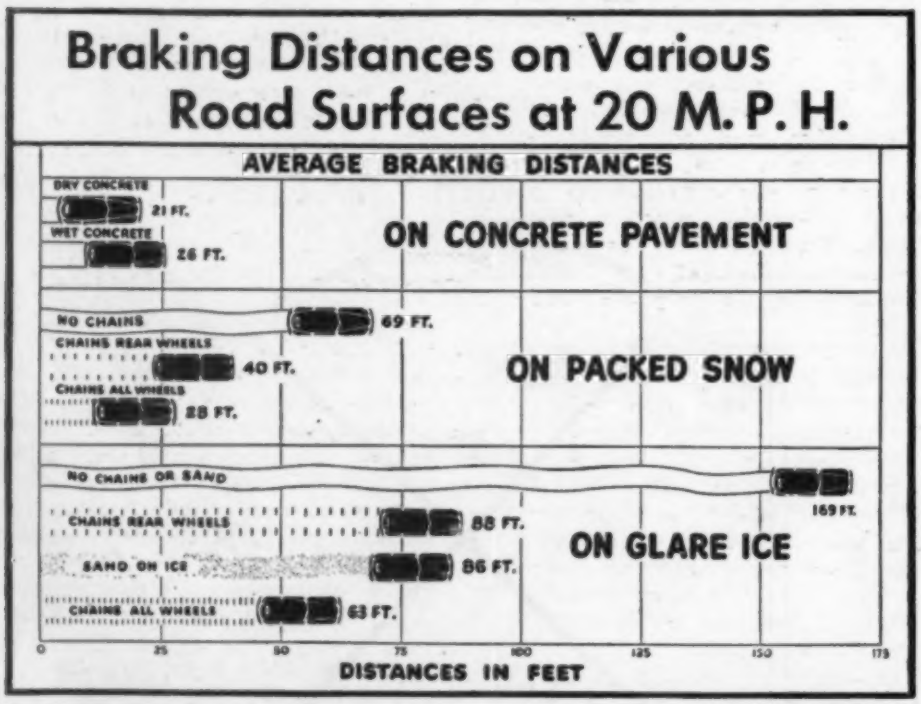
You can protect the exterior of the muffler and tailpipe with bake-on enamel. Touch-up paint on chassis or body rust spots (remove the rust first with abrasive) is helpful. Where salts are used on icy streets and roads, flush the chassis at intervals.

. . .

One of the best aids you can have in caring for your car and maintaining its efficiency is the instruction manual furnished by the manufacturer. If you haven't a copy write to the factory for one, giving the year and model of your car. Read the manual carefully; it contains valuable and *specific* data.

It is not a good idea to put off repairs or adjustments when you know they are needed and unavoidable. Small repairs deferred are likely to turn into big repairs. And if adjustments to compensate for normal wear are neglected, wear takes place at an accelerated rate. Then proper adjustment often becomes impossible.

These are general statements, hard to bring home to most car owners. But if your car could talk, it might say "You will have to be a very smart operator to show a profit out of neglecting me."[2]



NATIONAL SAFETY COUNCIL

USE YOUR BRAKES SPARINGLY: SAVE ON FUEL AND WEAR

Coast up to stops and corners with closed throttle and look ahead as you drive; anticipate the need for slowing down. It's economical, and safer too

[2] For additional information on caring for your car, see September 1939 *Reports*.

Radio-Phonographs with FM

Here are CU's final, complete ratings of 12 FM radio-phonograph combinations . . . plus some pointers on operating tone controls to get maximum tone quality for various purposes

SINCE CU's report in the November issue on six radio-phonograph combinations with FM, six more combinations have been tested, making twelve in all.[1] Final and complete ratings of these twelve combinations appear below. Note that with the addition of new models to the listings, the *Zenith* 12H689 has been replaced as a "Best Buy" by *Macy's* 5241 and *General Electric* LFC-1128. But the *Philharmonic* Futura K-1, found to be all-round best in November, still has that ranking.

Before acting on the information given in the final ratings, members should refer to the full report on FM radio-phonographs in the November issue. That report contains important advice on points to check before choosing a combination, pros and cons of buying an FM set at this time, information on how to construct inside and outside FM aerials, and a reference to available discounts. These things you need to know almost as much as which brand is best.

TONE CONTROLS

To get the best tone quality from radio-phonographs, you must learn how to operate the tone controls properly. All the radios tested by CU were equipped with two tone controls, one for treble, one for bass tones. The purpose of the treble control is to lower the highest audible pitch of sounds; the bass control increases the intensity of the low pitches.

When tuning in on a station, or playing a record with a newly acquired combination, set the bass control at its minimum position and the treble control at its highest. Then, if too much hiss or crackle is heard, turn down the treble control to the point where the disturbance becomes bearable to the ear. Adjust the bass control until the amount of bass produced is pleasing. *(See page 43.)*

The position at which the treble control produces the best effect generally varies from station to station. Weaker stations, especially short-wave stations, usually sound better with the treble control turned down so as to eliminate hiss and crackle. Loud static-free stations permit you to keep the treble control turned all the way up, and thus get a wider range of tones.

In order to minimize record hiss, most people operate phonographs with the treble control turned down or use a needle which does not pass high pitches. If you can learn not to mind this hiss, you can leave the treble control turned up, use a full tone needle and thereby get high pitches of music which will otherwise be lost along with the hiss.

Adjust the bass control according to the type of program you're listening to. Speech normally sounds best with the bass control turned all the way off, while dance music requires a maximum of bass to bring out the rhythm.

GUARANTEES

When you buy a radio-phonograph combination, try to get the dealer to agree to a guarantee period during which you can return the machine and get your money back if you are dissatisfied. And be sure that *you* are to be the one to decide whether the set is deficient.

Three of the combinations tested by CU carry standard home trial guarantees: *Lafayette* (30 days), *Philharmonic* (10 days) and *Scott* (30 days). If you are not satisfied, be sure to return the set within the specified time limit and get your refund.

The *Scott* radio is claimed to be custom-built; actually it is a production item. In the sample tested the radio did not fit the cabinet, so that it was necessary to cut one of the cabinet parts to fit. As a matter of fact, none of the radios tested were custom-built in the sense that they correspond to the individual customer's specifications or requirements, though *Philharmonic* and *Macy's* also make this claim.

FM ADAPTERS

CU has been informed that the *General Electric* JFM-90 FM adapter ($59.50, list), listed in the November *Reports* as highest in quality, is offered by Sears-Roebuck for $29.95 as Cat. No. —6143. CU tried to purchase this adapter from Sears' Philadelphia and Chicago warehouses, but none were available. For those persons who can get the adapter from some other Sears' warehouse, it is by far the "Best Buy."

TESTS & RATINGS

All combinations tested by CU were for a-c operation only. Universal (ac-dc) radios usually sacrifice volume and tone; in order to use an a-c radio on d-c, electricity inverters (converters) must be purchased.

Among the combinations tested, current consumption varied from 105 to 190 watts. If you listen five hours each day and pay 5¢ per kilowatt-hour, this will amount, respectively, to $9.60 and $17.30 annually. In the ratings, current consumption is noted as "high" if the combination used more than 175 watts, and "low" if less than 125 watts were used. Where no mention of current consumption is made, the combination used between 125 and 175 watts.

A number of radios tested had shock hazard. To avoid getting a shock from such a radio, a wire should be connected between a "ground" (water pipe or steam pipe) and the ground post in the back of the radio.

The "standard short wave band" incorporated in some radios is a single band tuning roughly from 6 to 18 mc. Due to this terrific range (12 mc. as compared to 1 mc. on the broadcast band) stations are very much jammed together and tuning is difficult while spotting a station on the dial is impossible.

Unless mentioned, no short wave band was incorporated in the radios tested.

The ratings below are in order of estimated *over-all* value. Nearly every radio failed in some respect. Unless you are especially interested in a particular feature as described in the ratings, the order of listing should serve as a good buying guide.

Best Buys

The following FM radio-phonograph combinations are judged to offer the best value for the money. For full details see listing under "Acceptable."

Macy's 5241. $149.50.

General Electric LFC-1128. $250, list. At the 40% discount offered by some stores, this is a much better buy than *Macy's* above.

Also see rating of ***Pilot*** below.

Acceptable

(In order of over-all quality without regard to price)

Philharmonic Futura K-1 (Philharmonic Radio Co., NYC). $377.50. (Sold by franchised dealers and by mail.) Matched walnut Cromwell cabinet. No shelf space

[1] As indicated in the November *Reports*, CU had expected to test 15 radio-phonographs altogether. One *Ansley* arrived too late for testing, and another *Ansley* and a *Crosley* were never delivered.

Tone Quality

THE following list of FM radio-phonograph combinations is in order of tone quality for each part of the combination (figures indicate ranking):

	FM		PHONOGRAPH		BROADCAST	
FREED-EISEMANN 52-L	good	(8th)	good	(7th)	good	(6th)
GENERAL ELECTRIC LFC-1128	excellent	(4th)	excellent	(1st)	good	(5th)
LAFAYETTE TC-295	excellent	(1st)	excellent	(2nd)	good	(9th)
MACY'S 2111	poor	(11th)	good	(11th)	good	(10th)
MACY'S 5241	good	(7th)	good	(10th)	good	(8th)
MAGNAVOX 51FK	poor	(12th)	good	(6th)	excellent	(1st)
PHILCO 42-1013	good	(10th)	poor	(12th)	good	(11th)
PHILHARMONIC K-1	excellent	(3rd)	good	(3rd)	excellent	(2nd)
PILOT 206	good	(6th)	good	(4th)	excellent	(4th)
SCOTT Laureate	excellent	(2nd)	good	(9th)	excellent	(3rd)
STROMBERG-CARLSON 925-PFM	good	(5th)	good	(5th)	good	(7th)
ZENITH 12H689	good	(9th)	good	(8th)	good	(12t)h

for records. Cabinet workmanship and design excellent. *Webster-Rauland* De Luxe mixer-changer and tuning dials in top under lid. Bass and treble controls excellent. Used the *General Electric* JFM-90 tuner chassis, which is separate and is installed by Philharmonic for $60 in their old non-FM models. No tuning indicator on FM. On broadcast band, excellent selectivity (variable) and whistle ("birdie") elimination, but poor telegraph signal rejection. Six mechanical push-buttons on FM but none on broadcast. Built-in FM antenna but no broadcast loop. Tubes inaccessible. Choice of cabinets at higher prices. Shock hazard except at record changer.

Scott Laureate with "4-unit" loudspeaker system, Oxford console and "Imperial" record changer (E. H. Scott Radio Laboratories, Inc., Chicago). Sold by mail order from Chicago for $428 plus about $7.50 for assembling by local *Scott* serviceman; shipping charges from Chicago to New York about $5. Assembling by the consumer—even one well versed in radio—is not recommended. Also sold by local representatives; price quoted by New York office for identical radio was $448.

Poor cabinet design. The radio panel inside the cabinet had a poorly finished edge and was made in an entirely different shade from the rest of the cabinet. No record storage space. *Seeburg* B record changer in top under lid. Bass not sufficiently low and judged to be somewhat too boomy in the minimum bass position. Insufficient high tones on phonograph reproduction. Excellent automatic volume control on broadcast. Excellent short wave tuning system covering the whole standard short wave band by means of a special vernier tuning dial and knob. Gaudy tuning dial. No push-buttons. Although the radio can be completely closed, there is no pilot light outside to indicate if the radio is on. No FM antenna. High current consumption. No shock hazard.

The following three radios were judged to be of equal over-all quality:

Pilot 206 (Pilot Radio Corp., Long Island City, N. Y.). $395, list. Mahogany (choice of walnut) Adam cabinet. Excellent design and good workmanship. Doors in front; shelf space for records. *General Industries* C125L changer in top under half-lid. Tone control system not very flexible and noise level on records somewhat excessive. Highest undistorted volume among radios tested. FM had "squelch" circuit to make the radio noiseless while tuning between stations. Poor whistle ("birdie") elimination on broadcast. Standard short wave band. No built-in FM antenna. Eight mechanical push-buttons to tune both FM and broadcast. Rather low current consumption. Provisions for plugging in a home recorder and a microphone; not available complete with recorder. Shock hazard.

Basic cabinet model is the ***Hepplewhite*** *201, $325, list which should be a "Best Buy" at the 40% discount offered in some stores.*

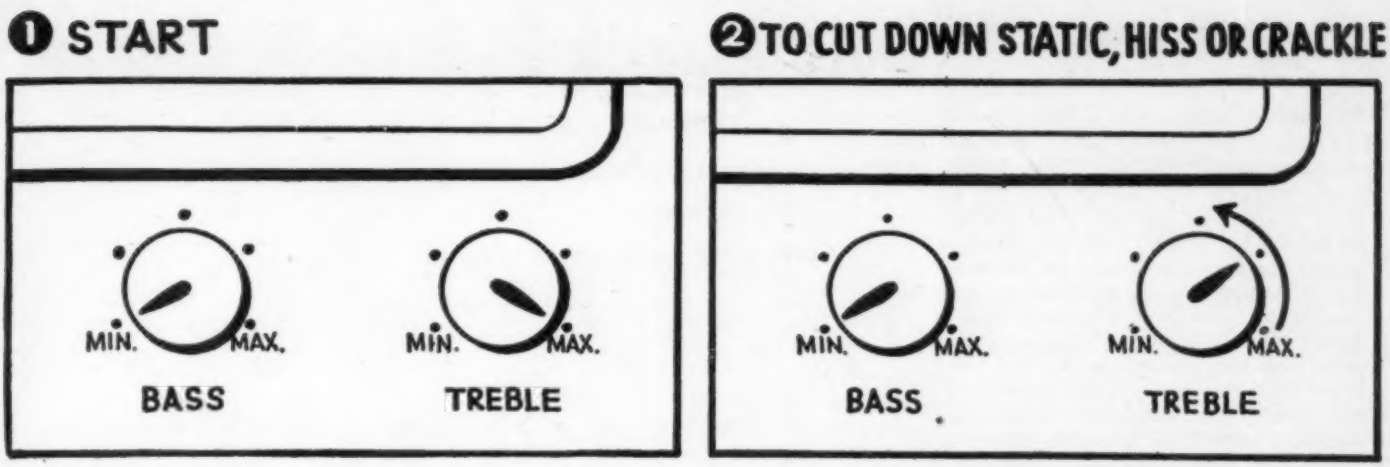
General Electric LFC-1128 (General Electric Co., Bridgeport, Conn.). $250, list. 18th Century walnut cabinet. Good design and workmanship except for a somewhat shaky record changer drawer. Six inches of record storage space. *RCA* 9930 record changer in slide-out drawer. Slight distortion on broadcast (not obvious to the ear). FM circuit with excellent static elimination and very stable tuning from the moment the set is turned on. Standard short wave band. Six mechanical push-buttons for both FM and broadcast stations. Built-in FM antenna and large broadcast loop. No tuning indicator on either broadcast or FM. Low current consumption. No shock hazard.

Stromberg-Carlson 925-PFM (Stromberg-Carlson Telephone Mfg. Co., Rochester, N. Y.). $290, list. 18th Century English mahogany cabinet (also available in walnut). Good cabinet design and workmanship. 12 inches of record storage space. *Webster-Rauland* 23-series record changer in top under half-lid. Good FM with practically no station drift after turning radio on. However, tuning eye was not sensitive to weak stations. On sample tested one FM station could be heard at several places on the dial; reject your set if you find this to be the case. On broadcast band, selectivity, automatic volume control, whistle ("birdie") and telegraph signal elimination were all poor. Short wave band more useful than average in that it covered only from 9 to 12 megacycles and therefore stations were less crowded on the dial. Six mechanical push-buttons for both FM and broadcast stations. Record changer control awkward to operate in this particular cabinet. No shock hazard.

The following radios were judged to be of a lower over-all quality than those above:

Lafayette Concerto TC-295 (Lafayette Radio Corp., NYC). $264.50. Mahogany Sherwood cabinet. Doors in front; shelf space for records. Poor cabinet workmanship and design. *Seeburg* Model J changer in top under lid. On broadcast, measurement showed tone distortion which, however, the average ear may not be able to distinguish, especially in view of the otherwise excellent tone quality. Poorly operating treble control. Excellent bass. Model tested had bad hum. Low undistorted volume but very high maximum volume (with distortion). Poor whistle ("birdie") elimination. No push-buttons and no built-in FM antenna. Impossible to turn volume off completely when switched to FM. On model tested, tuning mechanism was defective. High current consumption. Shock hazard. Also available in a choice of cabinets, and without any cabinet. The basic model is TC-299 in modern walnut, at $229.50. The complete radio without any cabinet and without a record changer is TC-287 at $137.50.

Zenith 12H689 (Zenith Radio Corp., Chicago). $250, list. Walnut cabinet. Shelf space for records. *Seeburg* Model B changer in retractable drawer. Large, high ratio tuning dial for easier tuning, but while this is of advantage on short waves, the advantage was offset by poor mechanical construction (excessive play). On broadcast, measurements showed tone distortion which, however, the average ear may not be able to distinguish. Very low noise on records; good tone control system. Had the best FM tuning indicator of all the sets tested. Two limiters, permitting greater noise suppression, but only two-gang tuning which may allow interference between stations as more FM stations go on the air. On the broadcast band sensitivity was rather poor, but there was good whistle ("birdie") and telegraph signal elimination. Standard short wave band. No FM push-buttons but six broadcast push-buttons. Built-in FM antenna and rotatable broadcast loop. Low current consumption. Shock hazard. Sample tested was delivered with completely inoperative FM. *Zenith* is not available in "modern" furniture. Models 12H695 and 12H696 are "period" cabinets and use the same chassis as above.



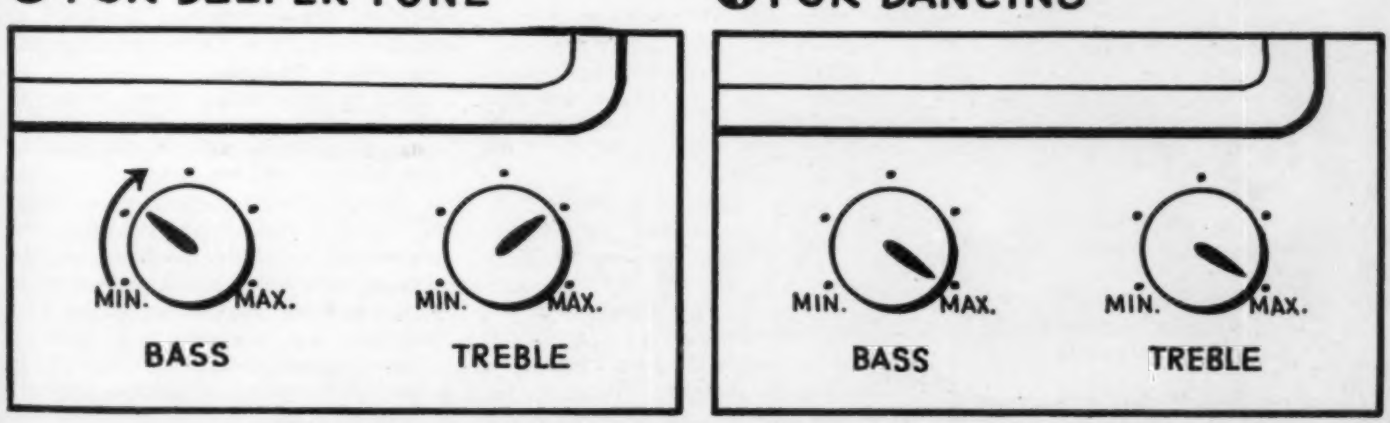
Freed-Eisemann 52-L (Freed Radio Corp., NYC). $310, list. Mahogany (or walnut) Hepplewhite cabinet. Doors in front; no shelf space for records. *Garrard* RC30A changer in top under lid. Separate FM and broadcast dials permitting switching from one to the other without retuning. Despite a special high-frequency loudspeaker, FM fidelity not good due to deficiency in extremely high tones. Good bass but bass control relatively ineffective. Higher than average noise level on records. FM had "squelch" circuit to make the radio noiseless while tuning between stations. However, squelch on model tested did not operate with an outside FM aerial. On broadcast band, excellent sensitivity but poor whistle ("birdie") eliminaton. Standard short wave band. No push-buttons and no built-in FM antenna. High current consumption. Shock hazard. Radio tested had a defective broadcast tuning mechanism which a radio repairman found impossible to adjust so that it would work perfectly. Also available in a modern cabinet as model 53 in which the *Webster-Rauland* De Luxe record changer is supplied.

Macy's 5241 (R. H. Macy & Co., NYC). $149.50. This radio is sold under various other private brand names for a comparable price. It is made by the Espey Mfg. Co., New York City. One way to recognize an *Espey* radio is to look at the extreme upper right hand corner of the tuning dial for the letters *E.M.C.* This particular *Espey* model may be identified by the fact that it has 14 tubes (including the tuning eye and rectifier).

Modern bleached oak cabinet. Poor cabinet workmanship and design except for the use of heavy wood panels and styling, which was good. Nine inches of record storage space (records stored horizontally) and a large utility drawer. *RCA* 9909 record changer and tuning controls in top under lids. Changer hard to operate due to its position in the cabinet. On broadcast, excellent sensitivity and excellent automatic volume control. 31-meter short wave spread-band. 6 push-buttons on broadcast, none on FM. No built-in antenna for either FM or broadcast. Shock hazard.

Magnavox 51FK (The Magnavox Co., Inc., Fort Wayne, Ind.). $297.50, list. Regency commode mahogany cabinet (choice of walnut). Fair cabinet design and workmanship. Cabinet lay-out poor in that the FM portion is placed not behind the same door as the rest of the controls, but behind a second door necessitating opening of both doors when FM is desired. Also, despite a completely closed cabinet, there was no pilot light on the outside to indicate that the radio is turned on. 13 inches of record storage space. *Seeburg* B record changer in top under half-lid. FM fidelity was not significantly better than broadcast fidelity in that the important extremely high tones were not in evidence. Dial design makes for comfortable, easy tuning. On broadcast, sensitivity and automatic volume control poor. Standard short wave band. Six push-buttons on broadcast. No built-in antenna for either FM or broadcast. No tuning indicator on FM. Tuning eye on broadcast but so placed that one must bend down to see it. Slight shock hazard.

Philco 42-1013 (Philco Radio & Television Corp., Philadelphia). $259.95, list. Hepplewhite walnut cabinet. Fair cabinet design and workmanship, but due to its extreme shallowness (15 inches) cabinet was poorly balanced. It tipped forward most easily when record player was pulled out. No record storage space. *Philco* 35-1285 record changer in a slide-out drawer with tilting loudspeaker. Measurement showed a little tone distortion on broadcast. Poor FM performance with insufficient static supression and bad drift of stations after turning radio on. FM very hard to tune, partially due to the absence of a tuning indicator and tendency to interference between FM stations. On broadcast, poor selectivity and whistle ("birdie") and telegraph signal elimination. Poor automatic volume control. Standard short wave band. No push-buttons on FM, only four on broad-



ADJUST YOUR TONE CONTROL ACCORDING TO THE TYPE OF PROGRAM

cast. No tuning indicator on FM or broadcast. Low current consumption. Shock hazard.

The following radio was judged to be of very low over-all quality and not worth even its low price:

Macy's 2111 (R. H. Macy & Co., NYC). $120. This radio has been discontinued by Macy's, but is sold under various other private brand names such as *Fairmont* and Bloomingdale's *Lexington* for approximately the same price. It is made by the Espey Mfg. Co., NYC. This particular radio may be identified by the fact that it has 11 tubes (including the tuning eye and rectifier). Modern walnut cabinet. Excellent cabinet workmanship but poor design. No shelf space for records. *Erwood* changer and tuning controls in top under lid. On broadcast just sufficient bass. FM fidelity was not significantly better than broadcast fidelity in that the important extremely high tones were not in evidence. Volume lower than others tested but acceptable for a small apartment. On broadcast band, measurement showed that there was a little distortion, poor selectivity, but good whistle ("birdie") elimination. No push-buttons on FM, six on broadcast. No built-in loop antenna for broadcast or FM reception. Tubes accessible for checking. Low current consumption. Shock hazard. Model was delivered completely inoperative; this model was exchanged but next sample had a defective tuning mechanism and record changer. The tuning mechanism was repaired by a Macy's serviceman but the record changer was not repaired satisfactorily.

Watch For . . .

Work on the following reports, among others, is either now under way or scheduled to begin soon:

Men's Pajamas

Men's Shirts

Hair Shampoos

Midget Radios

Summer Motor Oils

Mineral Oils

Alarm Clocks

Household Glue

First Aid Kits

Cooking Utensils

Garden Seeds & Equipment

Automatic Record Changers

Here CU rates separately the automatic record changers installed in the radio-phonograph combinations tested . . . and covers some points to check if you're purchasing a changer by itself

THE longer you wait to buy a radio-phonograph combination, the less chance you will have of getting a particular make and model of automatic record changer with it. Even now you may have to take whatever kind the manufacturer happens to put into the combination.

But some people may still have a choice in the matter, and others may wish to buy a record changer by itself—to add to a radio or to replace an old record changer in a combination. For these persons, CU here presents ratings and some buying advice.

A word of caution: if you already have a manual record player, you probably shouldn't buy an automatic record changer at the present time. For one thing, a record changer doesn't take standard sequence albums, which still have to be played manually (unless you get one of the costly turnover changers). And, more important, this is not the time to buy articles which you can conveniently do without.

Among the record changers tested by CU, two basically different types were found. In most of the American changers the record stack rests on two or three metal arms ("shelves") located outside the edge of the turntable. During the changing cycle, a knife on at least one shelf slices in between the bottom record and the others, and the shelves themselves move out, permitting the bottom record to drop down onto the turntable; then the shelves return and the knives withdraw, putting the rest of the records into position for the next cycle. There is considerable difference among the various makes in the mechanical design of these shelves and knives.

If all records were of the same thickness and had rounded edges, and if none were warped, the shelf-knife arrangement would be virtually foolproof. But all records are not perfect, and the result is that the knives may cut into either the bottom record or the one above it, jamming up the mechanism, chipping the record edge or simply not dropping the record.

The other type of changer was first introduced by the makers of the British *Garrard* and lately has been adapted for a number of domestic changers. CU tested the *Garrard*, the *General Instruments* and the *Philco* changers. Here the stack of records rests mainly on a knee in the turntable spindle, which is stationary. At the proper time a lever at the edge of the records pushes the bottom record off the knee in the spindle and the record drops onto the turntable. This type won't hurt record edges, and is jamproof on all but records of odd thicknesses and sizes (old pressings).

Both types of changers, the "knife-type" and the "push-type," are available in standard models which will take records of only one size (ten-inch or twelve-inch) at a time and in mixer models which take mixed sizes together and in any sequence. Since the standard non-mixer models will accommodate *either* ten-inch *or* twelve-inch records, a mixer model has few advantages to compensate for its higher price.

As changers go, the knife-type is a relic of the past and CU can't advise consumers to buy it. But the fact remains that record changers are now very scarce, so that manufacturers are forced to put almost any type they can get into their combinations.

If, in shopping through stores and radio supply houses, you manage to unearth changers not listed below, and of only the knife-type, give preference to a model with a single knife shelf and one stationary shelf. (This style is least likely to chip records and jam the mechanism.) But try, first of all, to get a push-type changer.

Until this year there was only one record changer which played both sides of a record in sequence—the *Capehart*. Now the *Capehart* has competition from *Garrard* and *RCA*. However, the prices of all three are way beyond the reach of most consumers, so CU included no such changers in its tests.

This is important: either before or after you buy a record changer, whether separately or in a radio combination, be sure to check its operation thoroughly so that the store can make adjustments or exchange it if necessary. Study the instructions carefully and then load the changer with a full stack of records in good condition (no warps, chips, &c.) and watch the operation.

See whether the needle scratches the record (by running across the grooves) as the automatic mechanism raises and lowers it onto the record; make sure

KNIFE-TYPE

Loaded records rest on two shelves. Knives slice in, cutting off bottom record from rest, shelves slide out, record drops onto turntable. Knife-type changers are likely to chip records and jam

the needle does not slip back in some grooves (as it may if there's a drag on the pickup arm). Check on both ten-inch and twelve-inch records to see that the changer goes into operation only after the record being played is finished, and not earlier; that it starts at the very beginning of each record, and not a few grooves in; and that it starts playing at full speed instead of catching up with a resultant whine in the tone. If you discover any faults, make sure they are not due to imperfections in the record rather than in the changer.

If you are buying a changer not listed in these ratings, choose one in which the pickup arm at the needle point weighs less than three ounces. A heavier pickup has *no* advantages and the definite disadvantage of increased record wear.

A bit of advice: pay some attention to the ease of operating any record changer in the particular cabinet in which it comes or into which you plan to put it. While the changer might be easy enough to operate in the clear, the construction of the cabinet may make loading, removal or other operations difficult.

A special warning: records will warp easily if kept on the "shelves" of a changer. Keep them flat or standing straight up; either way is all right so long as there is no bending force on them. Once a record has warped, you can try to straighten it by placing it concave side down in the sunlight on a flat surface with a weight on the center.

If you have any reason to believe that the record changer is not level, prop up the radio so that the changer becomes level. Some changers may operate better if the radio is tipped so that the pickup arm of the changer swings toward the center of the record.

Record changers should be oiled according to the manufacturer's instructions. If you haven't the service notes (in which such instructions appear) you can —and should—write and get them.

With the exception of the *General Instruments* changer, CU tested only record changers installed in the twelve FM radio-phonograph combinations reported on in this and the November *Reports.*

The changers tested were scored on the basis of time required for the changing and on ease and reliability of operation both with a full load of records and manually. Tone of the pickup and its weight at the needle were not evaluated, since the changers were tested as installed in particular radio-phonograph combinations; tone was thus a result of both the pickup and the radio's characteristics. And both tone and weight at the needle depend to a considerable extent on the particular cartridge used.

All of the domestic changers tested used a constant speed a-c motor driving the rim of the turntable. These will run at approximately the proper speed while playing a record so long as the electric generating station frequency is constant.

Some makes of changers are offered with two-speed turntables: the regular 78 rpm and the slow 33⅓ rpm speed. Since very few slow speed (long-playing) records have been released, slow speed is useful only if home recording is contemplated. (Recording at 33⅓ rpm allows you to get more program material onto a given record space.)

Best Buy

The following record changer of the "Acceptable" list is judged to offer the best value for the money. For full details see listing under "Acceptable."

General Instruments Split Spindle model. About $15.

Acceptable

(In order of over-all quality without regard to price)

General Instruments Split Spindle model (General Instruments Corp., Elizabeth, N. J.). Sold by radio supply houses for about $15. Push-type changer for ten 12" or twelve 10" records. Record stack rests horizontally on a knee in the spindle and on one side support. Had fastest changing cycle of all changers tested (3½ seconds). Weight of pickup at needle, 2 oz. Exchangeable-needle cartridge; instead of the usual thumb screw, cartridge had a flush set-screw with a screwdriver slot head to permit changing of permanent needles at home. The *General Electric* changer LRP-170 (not tested) is identical to this *General Instruments* changer.

The following two record changers were judged to be of comparable over-all quality:

Webster-Rauland DeLuxe W-1291-S (The Rauland Corp., Chicago). $97.50, list. Sold by radio supply houses for about $55. Knife-type mixer changer for fifteen 12" to seventeen 10" records or sixteen records of both sizes. Only domestic changer tested which shut itself off after the last record. Pickup weight at needle, 1.4 oz. Permanent-needle cartridge. Changing interval, 6 seconds. No adjustments of any kind required for loading or removing records. Used three changer shelves instead of the usual two; consequently, there is more chance

PUSH-TYPE

Loaded records rest on knee in spindle and single side support. Metal bar pushes bottom record off knee onto turntable. Push-type changers are superior to knife-type

Needles

CU still cannot, on the basis of present information, advise a permanent needle, although its convenience is undeniable. Its disadvantage lies in its inability to be shaped to conform to the groove of a particular record; hence, in the opinion of CU consultants, it tends to put extra wear on the record.

Furthermore, the permanent needle may play well on most records, but may distort and hiss on some, especially American issues recorded in Europe.

And finally, in the case of most permanent sapphire cartridges (without the usual thumb screw for exchanging needles), accidental chipping of the sapphire requires replacement of the whole cartridge, which at present costs about $5 in radio supply houses.

If steel "single-play" needles are used, CU's information is that there is no need to buy expensive shadowgraph-inspected needles. The plain Full Tone needle is probably just as good (and much cheaper) since any deformations of the needle are supposedly ground down during the first few revolutions of the record.

According to CU's information, probably the best needle to use with record changers, all things considered, is a chromium needle. This will last some 20 playings and should be exchanged as soon as the tone quality begins to degenerate (listen for jarring, buzzing or the like). In the opinion of one of CU's consultants, the Columbia chromium needle is somewhat better for playing both Columbia and Victor records than the Victor chromium needle. To the best of CU's knowledge, the cheapest chromium needle is sold by mail by Sears-Roebuck at 8 for 19¢, plus postage.

(as compared to a single knife of the same type) that one of the changer knives will meet a ragged or warped edge and jam or otherwise fail to work. In CU tests, however, the changer performed very well. Available with a home recording attachment.

Garrard RC30A (Garrard Sales Corp., NYC, representatives of the Garrard Engineering & Mfg. Co., Ltd., Swindon, Wiltshire, England). $82.50, list. Sold by radio supply houses for about $50. Push-type mixer changer for only eight records. Record stack rests at an angle on a knee in the spindle and on one side support. Stops after the last record if the holding lever is lowered onto the record stack after loading. *Because records cannot be played manually, the Garrard is "Not Acceptable" for owners of "manual sequence" albums.* Center drive motor with adjustable turntable speed. Pickup weight at the needle, 2½ oz. Exchangeable-needle cartridge. Changing interval, 9½ seconds (longer than average). Motor not strong enough to start if shut off during the changing cycle. Because of this, there is danger of leaving the motor switch on without being aware of it. The *Garrard* mechanism must be handled very carefully and expertly.

The following record changers were judged to be of poorer over-all quality than those above:

Seeburg Model B with slide-switch (J. P. Seeburg Corp., Chicago). Sold by radio supply houses for about $17. Knife-type changer for ten 12" or fourteen 10" records. Pickup weight at needle, 1½ oz. Permanent-needle cartridge. Changing interval, 5 seconds (shorter than average). To remove stack of played records, each of two changer shelves must be twisted out of the way. To place a new stack, each shelf must be turned either into the 10" or 12" record position. When not playing, the pickup arm can be snapped into rest position off the record. Available with a home recording attachment.

Webster Rauland W-1271-S Series 23 (The Rauland Corp.). $54.75, list. Knife-type changer for ten 12" or twelve 10" records. Pickup weight at needle, 1.4 oz. Permanent-needle cartridge. Changing interval varied between 6 and 12 seconds depending on moment when the last groove was reached or when the reject button was depressed. Single-knife changer with the other side of the record stack supported on a plain shelf. Choice of manual, 12" or 10" operation as well as rejection by means of four push-buttons. Both the knife and stationary shelf must be turned by hand into position for either 12" or 10" records.

General Industries C125L (The General Industries Co., Elyria, Ohio). $39.95, list. Sold by radio supply houses for about $24. Knife-type changer for eleven 12" or twelve 10" records. Pickup weight at needle, 1.7 oz. Exchangeable-needle cartridge; instead of the usual thumb screw, cartridge had a flush set-screw with a screwdriver slot head to permit replacement of permanent needles at home. Changing interval, 7 seconds. To remove stack of played records, only one lever must be moved. (Both changer shelves are moved by the single lever.) To place a new stack, the lever must be set in either the 10" or the 12" position. Construction such that repeated resetting of the lever scratched the top surface of the changer. Lever position for 12" records somewhat difficult to locate, and lever did not work smoothly. Available with a home recording attachment.

RCA 9930 (RCA Mfg. Co., Camden, N. J.). Not sold separately. Knife-type changer for ten 12" or twelve 10" records. Pickup weight at needle, 2 oz. Permanent-needle cartridge. Changing interval, 6 seconds. Single knife changer with the other side of the record stack supported on a plain shelf. *Because records cannot be played manually, the RCA is "Not Acceptable" for owners of "manual sequence" albums.* To change from 10" to 12" operation or vice versa, only the plain shelf must be twisted into position; the knife shelf moves in simultaneously. After the last record, arm remains automatically in rest position, but turntable keeps revolving until shut off. Model tested (in *GE* radio) was received with a poorly adjusted arm so that the needle would clear a maximum of only eight records.

RCA 9909 (RCA Mfg. Co.). Not sold separately. Knife-type mixer changer for seven 12", eight 10" or seven records of both sizes. Pickup weight at needle, 3½ oz. (excessive). Exchangeable-needle cartridge. Changing interval varied between 5 and 8½ seconds depending on moment when the last groove was reached or when the reject button was pushed. The manufacturers do not recommend that this changer be used as a mixer. However, in CU tests it performed well as a mixer, except that if the last record was a 12" record, it was repeated from the middle instead of from the beginning. Model tested (in *Macy's* radio) was received in a condition where it would jam up on more than six records. In addition, the needle scratched the record as the record was rejected, each record started with a whine, and there was friction in the pickup bearing.

Seeburg Model J with a push-button switch (J. P. Seeburg Corp.). Sold by radio supply houses for about $20. Knife-type changer for ten 12" or twelve 10" records. Lack of "manual" position made the changer more complicated to handle. Pickup weight at needle, 2.6 oz. Exchangeable-needle cartridge. Changing interval varied between 4 and 10 seconds depending upon moment when the last groove was reached or when the reject button was pressed. Available with a home recording attachment.

Erwood (Oak Mfg. Co., Chicago). Sold by radio supply houses for about $18. Knife-type changer for eleven 12" or thirteen 10" records. Pickup weight at needle, 2.7 oz. Exchangeable-needle cartridge. Changing interval, 8 seconds (longer than average). To remove played records each of the two changer shelves must be twisted to get them out of the way. Choice of 10" or 12" records made by means of a switch. Available with a home recording attachment. This changer performed poorly in CU's tests.

Not Acceptable

Philco 35-1285 (Philco Radio & Television Corp.). Not sold separately. Push-type changer for twelve 10" or ten 12" records. Pickup weight at the needle, 1.4 oz. Special *Philco* "Beam of Light" pickup with a permanent needle. Changing interval, 5 seconds. Available with a home recording attachment. Model tested would not play 12" records; reject button and cycle-starting mechanism were very erratic; flutters and wavering of tone were apparent. This changer represents an abortive attempt at designing a really good record changer. It has technically good features but evidently so many things went wrong in the design that a special five-page bulletin has been issued explaining "adjustments" to be made on the changer by servicemen.

Household Oils

You can pay a lot for a poor oil, but get a good one for less. CU's tests on 22 brands show which give you the most for your money

THE seeming ease with which habit and advertising can make a product a household byword—regardless of its quality or "value for the money"—has been noted many times in these pages. Household oil is no exception to the pattern. In many American homes *3-in-One* is a synonym for lubricating oil.

Yet CU's recent tests on 22 brands of household oils showed that one type of *3-in-One* was "Not Acceptable," while the other ranked near the bottom of the group in quality. Furthermore *3-in-One* costs more than *three times as much as Gulfoil*, one of the highest quality oils tested.

If you have a work bench at home or even if your mechanical activities are confined to puttering and tinkering, a general purpose lubricating oil is a must for you. But it's a handy thing to have around in any case. It can be purchased in small quantities and, if the quality is good, will keep indefinitely. A drop in the right place will make many household gadgets easier to operate and, more important, will lessen wear and tear on machinery.

WHY LUBRICATE?

Wherever the surface of a metal part rubs against the surface of another metal part, there is friction. When friction becomes excessive, much heat is produced and squeaking, rubbing noises can be heard. Operation becomes difficult and the metal is worn away.

To avoid or reduce this friction to a minimum, a film of oil is applied so that it separates the metal parts. However, the lubricant moving on itself produces some friction; and the thicker and heavier the oil, the greater the friction. Moreover, the consistency of oil alters according to changes in temperature and pressure; the greater the heat and pressure, the thinner the oil.

From all this comes the clue to proper lubrication: use oil thin enough to produce a minimum amount of friction (from itself) but thick enough to provide an adequate film under various conditions of temperature and pressure. Heavy machinery will require grease or heavy lubricants; light machinery, thinner oils.

Under the heading of light machinery come most household items: small hand tools, sewing machines, &c. One type of oil can be used for all of these—a light machine oil. For equipment like electric motors of 1/6 or more horsepower, slightly heavier lubricants such as light motor oils (SAE 10W) are more suitable. Special light oils processed for particular uses (watchmakers' oil, for example) are also available, but are expensive and seldom necessary.

WHAT MAKES A GOOD OIL

Often, oiled equipment lies around unused for a long time; during this period the oil shouldn't harden or "gum up." But it's apt to if it has been processed mainly from animal or vegetable sources. Consequently, petroleum (mineral) oils are much more satisfactory.

These petroleum oils should be highly refined so as to remove nearly all gummy and asphaltic materials as well as organic and mineral acids. The acids are apt to have a corrosive or tarnishing effect on metals. Highly refined oils are very light in color, usually pale yellow or green-yellow.

Some household oils are blends of petroleum and vegetable or animal oils; the vegetable and animal oils reveal their presence by giving off fishy odors at higher temperatures. On the one hand, these oils probably add nothing to the quality of the lubricant, but on the other, their inclusion in small amounts is definitely not harmful.

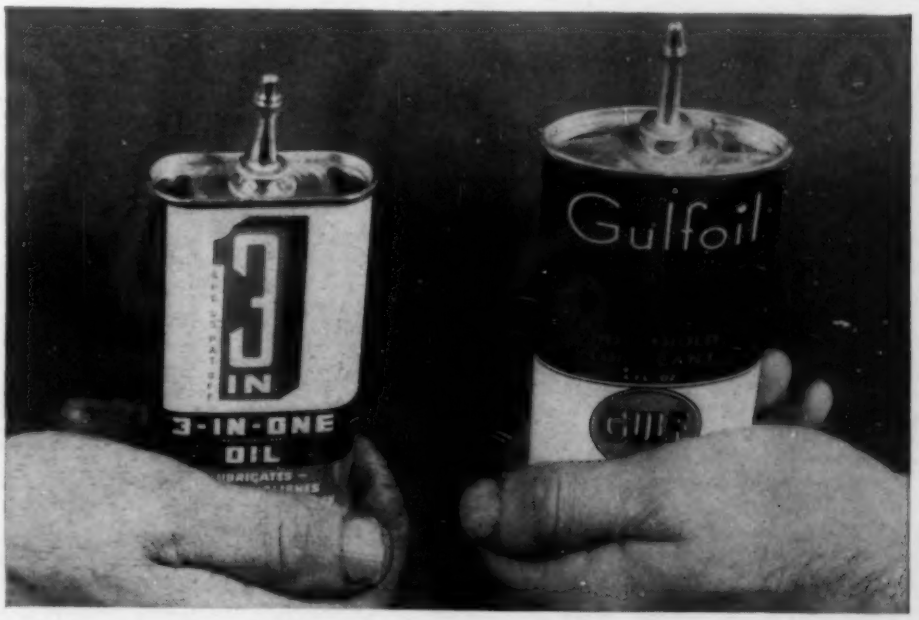
All these factors notwithstanding, the most important characteristic of a lubricating oil is its viscosity, or consistency. A light bodied oil is said to have a low viscosity; heavy oil, a high viscosity. The viscosity of oil varies, of course, as the temperature changes; and the viscosity of some oils changes more rapidly than that of others.

The viscosity index is the measure of such a change. A high index means that the oil varies relatively little in consistency with temperature changes; a low index indicates relatively large variation. Since oil with a high viscosity index provides surer protection under all circumstances, it is preferable.

Manufacturers frequently dilute heavy oils with kerosene so as to produce a light, cheap lubricant. Kerosene is helpful in polishing and in rust removal, but it has very little lubricating effect. Though small amounts of kerosene are naturally present in almost any light oil, the consumer shouldn't pay for pure lubricating oil and then get a large proportion of kerosene.

If you regularly use large quantities of lubricating oil for jobs where a low flash point and frequent viscosity changes aren't drawbacks, you can save quite a little money by doing some diluting on your own. Use four parts of a good quality light motor oil (SAE 10W, preferably; see January 1942 *Reports* for ratings of motor oils) to one part of kerosene. Less refined than the average prepared household oil, this mixture nevertheless will be as satisfactory for many purposes. And its cost will be considerably less, running about 0.7¢ to 0.8¢ per fluid ounce.

Many manufacturers of household oils



POOR BUY GOOD BUY

Low quality 3-in-One costs three times as much as high quality Gulfoil

claim that their products, besides furnishing lubrication, are just the thing for polishing furniture, preventing rust, &c. Not only are these claims somewhat doubtful, but, more important, they aren't pertinent. As long as a household oil provides proper lubrication, doesn't gum up, has no tarnishing or corrosive effects, it's doing its job.

HOW CU TESTED

CU tested two to six samples of each of 22 brands of household oil for viscosity at different temperatures, viscosity index, specific gravity, flash point, color, corrosive effects, and net contents. Ratings are based on these factors.

All brands of oil came in metal containers with convenient spout tips. Sizes ranged from one fluid ounce to one quart, the average being three or four fluid ounces. They were available either at 5-&-10-cent stores, department and hardware stores, or at service stations.

Two of the brands tested were labeled as heavy oils, for use on electric motors. Tests showed that they were heavier than regular SAE 10 motor oil. If you use enough to buy in quart quantities, the motor oil is a better buy.

LIGHT OILS

Best Buys

The following oils of the "Acceptable" list are judged to offer the best value for the money, in the order given. For full details, see listing under "Acceptable."

Gulfoil. 10¢; cost per fl. oz., 2.5¢.
Sinclair. 15¢; cost per fl. oz., 2.8¢.

Acceptable

(In order of quality without regard to price)

Esso (Esso Co., Bayway, N. J.). Large size, 25¢; cost per fl. oz., 6.3¢. Small size, 10¢; cost per fl. oz., 10¢.
Gulfoil (Gulf Oil Corp., Pittsburgh). 10¢; cost per fl. oz., 2.5¢.
Amoco (American Oil Co., Baltimore). 25¢; cost per fl. oz., 6.3¢.
Sinclair (Sinclair Refining Co., Inc., NYC). 15¢; cost per fl. oz., 3.8¢.
Texaco (The Texas Co., NYC). 15¢; cost per fl. oz., 5¢.
Singer (Singer Sewing Machine Co., NYC). 20¢; cost per fl. oz., 6.7¢.
Richfield (Richfield Oil Corp., NYC). 25¢; cost per fl. oz., 6.3¢.
Ritz (manufacturer or distributor not stated). 10¢; cost per fl. oz., 2.5¢.
Ever-Ready (Ever-Ready Co., NYC). 10¢; cost per fl. oz., 2.5¢.
Atlantic (Atlantic Refining Co., Philadelphia). 25¢; cost per fl. oz., 6.3¢.
Veedol (Tide Water Associated Oil Co., NYC). 15¢; cost per fl. oz., 3.8¢.
Ward's Cat. No.—9531 (Montgomery Ward). 9¢ plus postage; cost per fl. oz., 2.2¢ plus postage.
3-in-One (The A. S. Boyle Co., Jersey City, N. J.). Large size, 25¢; cost per fl. oz., 8.3¢. Small size, 10¢; cost per fl. oz., 10¢. Had lowest flash point of all "Acceptable" oils. Lack of uniformity among different samples.
Shell (Shell Oil Co., NYC). 20¢; cost per fl. oz., 6.7¢.

Not Acceptable

Cities Service (Cities Service Oil Co.). 20¢; cost per fl. oz., 5¢. Had an excessively low flash point.
Sears' Cross Country Cat. No.—4411 (Sears-Roebuck). 9¢ plus postage; cost per fl. oz., 2.2¢ plus postage. Labeled "General Purpose Oil." Showed excessive corrosive and tarnishing effects. Had a low viscosity index.
Sears' Cross Country Cat. No.—4408 (Sears-Roebuck). 19¢ plus postage; cost per fl. oz., 0.6¢ plus postage. Labeled "Light Machinery Oil." Was heavier than *Sears'* Cat. No.—4411 above. Had an excessively low viscosity index.
Dart New No. 1 (Slick Shine Co., Inc.; distributed by Kress Stores). 10¢; cost per fl. oz., 2¢. Showed excessive corrosive and tarnishing effects.
Mobil (Socony-Vacuum Oil Co., NYC). 25¢; cost per fl. oz., 6.3¢. Showed excessive corrosive and tarnishing effects.
Sunoco (Sun Oil Co., Philadelphia). 15¢; cost per fl. oz., 3.8¢. Had an excessively low flash point.

HEAVY OILS

Acceptable

Gulf Electric-Motor Oil (Gulf Petroleum Specialties, Pittsburgh). Large size, 24¢; cost per fl. oz., 3¢. Small size, 10¢; cost per fl. oz., 5¢.

Not Acceptable

3-in-One Heavy Body Oil (A. S. Boyle Co., Jersey City, N. J.). Large size, 25¢; cost per fl. oz., 8.3¢. Small size, 10¢; cost per fl. oz., 10¢. Had an excessively low viscosity index.

Care & Repair: *Electric Cords*

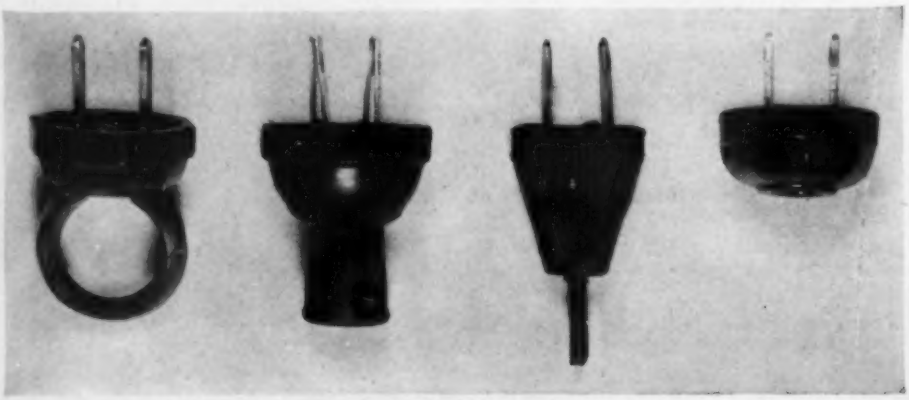
By carefully preserving and repairing household appliances so that new equipment need not be purchased, consumers can make an important contribution to the war effort. Every toaster, washing machine or electric cord repaired means so much less strain on a market already suffering from acute shortages.

To aid consumers in this conservation of national resources, Consumers Union will from time to time publish brief, practical reports telling how to get the most from your equipment. To begin with: some notes on the care and repair of electric cords.

NORMALLY-FUNCTIONING cords which are not badly worn, but which have covers frayed or damaged in a few places, can be repaired by wrapping with friction tape. If you don't have friction tape on hand, ordinary adhesive tape can be used, though it hardens sooner and is not so satisfactory.

When a cord used with electrical heating appliances (toasters, irons, &c.) becomes frayed, be sure to wrap it immediately. If you don't, the whole insulation may loosen. Badly worn cords should be discarded since they involve the danger of short circuit and will not stay in good repair.

Sometimes an otherwise good cord becomes broken or severely damaged at one point. You may be able to salvage such a cord by cutting out the bad section and splicing the two good sections together. *First of all, pull out the plug.*



APPLIANCE PLUGS

Try to get one of the first three, which may be easily gripped. The middle two are of soft rubber and hence more durable than the molded ones.

Remove the outer covering from about two inches of the end of each good section, separating the two inner wires. Scrape off the insulation from each of these wires for about an inch, but be careful not to cut the wires. Twist the tiny threads of each wire together *counterclockwise*.[1]

Next, take one wire from each section of cord and hold them together in the form of an X, in such a way that the wire in your left hand is on top. Twist each free end separately around the opposite section of bare wire. Do the same with the two remaining wires. If at all possible, solder these splices. Then wrap each spliced section, and finally the two wires together, with friction tape torn in half lengthwise.

It is better, if possible, to use *rubber tape* around each wire and friction tape around both; however, for ordinary home use, friction tape alone will do.

If the plug at the end of an electric cord gets broken, don't throw away the cord. For a nickel you can buy a new plug and attach it to the cord.

The body of the plug should be small and flat, so that it won't cover up adjacent sections of the outlet, and it should be easy to grip. This discourages pulling out the plug by the cord. Preferably, each leg should be made of a springy double strip of metal rather than of a single strip.

The photograph on page 48 shows four kinds of plugs, two of soft rubber and two molded. The soft rubber ones are better because they are more durable.

A plug like the one third from the left can be easily attached to a cord. First, force the soft rubber case from the body of the plug and thread the end of the cord through this case. Then prepare the end of the cord as you would for splicing.

When you have the two wires of the cord bared and twisted, loosen the large screws at the inner end of each leg of the plug. Slip one wire around one screw and the other wire around the other screw until the part of the wire still rubber-covered just reaches the screw head. Be sure to twist the wire *clockwise* under the head of the screw (but don't carry it the full way around until it crosses itself); and be sure that no part of one wire touches any part of the other.

Finally, tighten each screw and slip the rubber case back over the plug, evening out the edges of the rubber so that the case fits smoothly.

[1] If the section cut out must be replaced, the best cord to use is the flat, all-rubber type, available at 5-&-10-cent stores or at electric and radio supply houses. Such cord is, in fact, the best for any use except with heating appliances.

GENERAL SECTION

CONSUMER NEWS AND INFORMATION

Advice to Taxpayers

Bigger and bigger taxes are in the offing for Americans. You can and should reduce your payments by keeping records, by utilizing legal options and deductions. This article tells how

JUST how much of your income will go to the government before the war is over can't be foreseen now. It seems fairly certain that exemptions will eventually be reduced to $500 for single, $1,000 for married persons or heads of families.

Furthermore, according to estimates of the American Investors Union, Federal income tax rates in 1943 may start at around 25% for these minimums and rise steeply for higher incomes.

As the 15th of March draws near, practically everyone is beginning to be consumed with the current great American worry: how am I going to pay my 1941 income tax? But it's equally, if not more, important to start concentrating on ways to meet the vastly increased taxes which will come for 1942 and 1943.

A first and virtually indispensable step is to start keeping careful *weekly* records of all your earnings and expenditures. Then you'll be able to fill out future income tax returns on a business-like basis, with clear proof for all your deductible items. Depend on haphazard methods, and you won't be able to take full advantage of the law.

Remember that there is nothing illegal in making use of these options and deductions. It's both lawful and economical to fill out your return intelligently. You don't help the country by paying more taxes than the law requires. In fact, this practice simply encourages Congress to delay further in plugging up numerous loopholes in the present tax structure which favor big corporations and individuals in the high-income brackets.

All in all, it behooves the average taxpayer, his living standards threatened by two to three times heavier taxes, to take pains in preparing his return.

DRAWN FOR CU BY CHRISTINA MALMAN

"The current great American worry"

"It behooves the average taxpayer to take pains in preparing his return"

Remember that this year you save $10 and up on every $100 legally deductible from your taxable income. Next year and the year after, it may be as much as $25 on $100.

WHAT KIND OF RETURN TO FILE

Under the present law single persons earning $750 or more a year must file returns, even though, after making deductions, they don't have to pay any tax. Single persons who claim a $1,500 exemption as head of the house must file a return, even if they earn only $750. Married persons (living with their spouses) must file returns if they have an annual income of $1,500 or more. Besides their $1,500 exemption, they are allowed $400 credit for each child or other dependent.

But persons who are heads of households simply because they support dependents, are denied credit for one dependent. That is, if you are not married and are supporting two dependents, you are allowed credit for only one. If you have one dependent, then you get only the $1,500 exemption.

If both husband and wife have incomes, they can file either two separate returns or one joint return. Many couples can obtain tax savings by filing separate returns, since the rates on their combined income may be very much higher than on their individual incomes. Thus, you'll do well to compute both individual and joint returns, and file the lower one.

Under the new 1941 tax law you can use either of two return forms if your income is $3,000 or less. One of these, a new optional form, is designed for individuals who receive all of their income from salaries, wages, compensation for personal services, dividends, interest or rent. This form cannot be used if your income is derived from business enterprises or a source other than those listed above.

The optional form provides for flat tax payments grouped in blocks of $25 on incomes from $751 to $3,000. Thus, a single individual earning $2,250 pays $124; a married person, $57 (if in both cases there are no dependents).

Even if the optional form appears to suit your circumstances best, it will probably pay you to compute your payment on the basis of the standard form, too, and file the one that allows the smaller payment. The optional form allows for deductions averaging only about 10% of your income. And many people within the $3,000 range will find that their allowable deductions are greater than 10%. If this is the case you may be able to save $20 to $30 by using the old form.

HOW TO MAKE OUT YOUR RETURN

The first step in filling out your income tax return is to determine all the items which have contributed to your gross income. This includes everything you have received as wages, salary, dividends, interest or rent during the year. It doesn't include money received from insurance contracts, damages for personal injuries recovered in law suits, or dividends on unmatured insurance policies. Any portion of your income which you have paid as alimony cannot be excluded. However, a wife does not have to report an allowance from her husband as income.

After establishing your gross income for the year, you may deduct certain expenses connected with your job, profession, trade or business. The general rule is that these expenses must be "ordinary and necessary" for your livelihood. Thus, you can deduct union dues, fees to professional societies, almost all taxes. In addition, you may deduct contributions (up to 15% of your net income) to charitable, religious, scientific and educational non-profit public service organizations.

Unfortunately, the application of the law is not equitable in recognizing what expenses are "ordinary and necessary." Jockeys and professional baseball players, for instance, can deduct the cost of their uniforms. But the uniforms of railwaymen and surgeon's coats are considered personal expenses; their cost cannot be deducted.

Moreover, some wealthy individuals maintain estates under the guise of operating farms. They then can deduct, as operating business expenses, all their "farm" costs—including their station wagons. People who own their own homes can deduct property taxes and interest payments on mortgages. But workers who have to pay expensive commutation fares to get to their defense jobs cannot deduct these necessary traveling expenses nor any part of the excessive rents they may have to pay to avoid commuting.

Obviously, small taxpayers must press for a more equitable interpretation of this phase of the law. But meanwhile you can get some relief by listing all the expenses which you consider essential in earning your livelihood. Books and magazines that you must use for your work; costs of attending meetings of your professional group; rent for studios and other space used for professional purposes which you pay out of your own pocketbook (if you use part of your residence for this work, that part of the rent is deductible); tools bought by yourself to use on your job—all such expenses are deductible.

There is no hard and fast rule to follow in deducting "business" expenses. If you genuinely consider that a certain

"You don't help the country by paying more taxes than the law requires"

"Take the whole procedure seriously and you will be rewarded"

AND BUY DEFENSE STAMPS WITH WHAT YOU SAVE!

expense is necessary for your livelihood, you should attempt to deduct it. If more small taxpayers claim such deductions, the tax authorities will be forced to reconsider their present unfair interpretations, will be obliged to establish general and equitable rules regarding deductions of necessary expenses.

INTEREST & LOANS, LOSSES & TAXES

Besides "ordinary and necessary" expenses, you can deduct interest you are paying on loans and installment purchases. The loans may be personal, business or family debts. You cannot, however, deduct the interest you may have paid in behalf of a friend; that is considered a gift.

A special problem arises with loans made on your insurance policies. You cannot deduct the interest you pay on your loan unless you actually go through the procedure of paying it to the insurance company. If the company simply adds the interest on to the loan, the interest is not deductible. In the future, it will pay you to arrange such payments even if you have to borrow the money elsewhere to cover the interest. After it has been paid, you can then borrow an equivalent amount from the insurance company and repay the money to the source of your loan.

Likewise, you can deduct interest paid on installment purchases only if the interest charges are separated from the actual cost of the merchandise. Therefore, make sure in the future that your purchase contract states clearly that you are making a specific interest payment with each installment.

If you have loaned money to a person

Congress Talks About Excess Profit Taxes But . . . .

Special to Consumers Union Reports

WASHINGTON, D. C.—Consumers should remember, as the new war tax bill takes shape in Congress, the recent reports by two Congressional investigating committees showing huge profits on defense contracts.

The reports drew a lot of talk in Congress about taxing excess profits, but when the tax bill comes along this talk will die down and there will be talk instead of sales taxes and payroll taxes.

That's what happened last year and it will happen again this, unless consumers line up with organized labor and organized farmers to fight it.

Both the Truman Committee in the Senate and the House Naval Affairs Committee showed there is plenty of room for stiffer excess profits taxes. The Senate Committee showed that some naval contractors are making more in a year than they have invested in their companies. The House Committee exposed profits as high as 247 per cent.

Those who are interested in taking taxes out of excess profits instead of out of the pockets of the people should not, however, be misled by the House Committee's report. It was one of the most biased, and inadequate, reports in Congressional history.

Although it provided hundreds of pages of data on the profits from individual contracts, the Committee made no effort to show what the companies were making on their invested capital. It gave industry as a whole a clean bill of health because the average profit, on the basis of the companies' own figures, added up to little more than seven per cent.

This figure was a phony for a number of reasons. First of all, the Committee admitted that many of the big profit makers, like Bethlehem and United Aircraft, had submitted no figures. Second, the company figures were accepted by the Committee without any investigation, and some were obviously juggled.

Worst of all, the House Committee figures were calculated on the basis of the percentage of profit the companies realized on each contract *on the cost of filling those contracts.* Any statistician will testify this doesn't mean a thing.

Take the airplane companies, which have financed 70 per cent of their plant expansion with government funds. One of them, with $10,000,000 invested, may turn out $100,000,000 worth of planes in a year. If that company makes only 10 per cent on the cost of the work, it adds up to about $10,000,000 or 100 per cent profit on its investment.

The entire House report was based on the premise that you can measure profits by the percentage relationship with the size of the contract. This theory leads up to a seven per cent limitation on profits, which Chairman Carl Vinson (D-Ga.) has always advocated.

Consumers should not be misled into supporting any such ineffective remedy for excess profits. There are only two ways to reach them. First, by insisting that procurement officers who award these huge contracts stop giving the companies what they ask—in other words, stop the profits at their source. The second way is to enact a stiff excess profits tax which collects on all profits above a fair reward for invested capital.

The way an investor measures whether an investment is a good one is by the return it brings. The government should measure profits the same way for tax purposes.

The most amazing thing about the House Committee's report was that, while it neglected this important factor in connection with the companies, the Committee went out of its way to get just this information from labor unions, although here it had no relevancy except for propaganda purposes.

A compilation showing that 117 national unions, with 6,000,000 members, had total assets of $82,000,000 (less than $14 per member) was used as the basis for a tirade against "concentration of wealth."

AFL President William Green punctured the charge in half a dozen different ways. He pointed out that union assets are heavily used for benefit payments of various kinds (unemployment, disability, old age, &c.), which tend to lighten the effects of social insecurity on the nation; that an important reason for large union assets right now is labor's no-strike policy, since funds earmarked for strike benefits are not being used; that the gain in assets during the period covered by the Committee's survey—a period of re-employment and hence of renewed dues payments—had averaged 9.7¢ per member per month.

Chief counsel for the Committee was Edmund M. Toland, who conducted the Smith Committee's biased investigation of the National Labor Relations Board. Toland's contribution this time was so biased against labor that only four of the Committee's 16 Democratic members would sign it.

—NATHAN ROBERTSON.

and the loan was completely or partially worthless in 1941, you can deduct this loss. If you don't keep books (most people don't) you should establish a record of these bad loans by correspondence. The Revenue Department will challenge your deductions if you can't prove with a fair degree of certainty that you won't recover all or part of your money. You can't claim the loss if you established it as worthless in 1940.

Another big item to bear in mind when making deductions is casualty losses. If you have suffered damages from fire, theft, hurricane, storm or the like, you can deduct the full amount—provided you are not covered by insurance—or that part of the loss which you did not recover from the insurance company. Such losses, however, are deductible only in the year in which you sustained the damages; you cannot claim a loss on your 1941 return for a theft that occurred in 1939.

Here is another instance where keeping records will be important. For in making a claim for auto repairs caused by an accident, you will need proof regarding the expenses actually incurred.

An extremely important category of deductible items consists of taxes. As a rule, almost all taxes except Federal income taxes can be deducted. This includes your city and State income taxes; Federal amusement taxes on movie and theatre tickets; excise taxes when paid directly by the consumer (but not the new Federal taxes on furs, jewelry, cosmetics); automobile license fees; use taxes like the new Federal tax on automobiles; telephone and telegram taxes. Should the government impose withholding taxes on wages and salaries, these undoubtedly would be deductible, too.

Considering the multitude of taxes which you pay throughout the year, you'll find it well worth your while to keep track of all payments involving taxes and deduct them on your return.

• • •

These are among the more important things to consider in filling out your return. But you will have to take the whole procedure seriously and devote plenty of time to it. Keep simple records of all your expenditures, your actual income and all items that are clearly deductible: this is the way to keep your head above water as bigger and bigger taxes roll in.

Perhaps these increased taxes will make the mass of people really insist that the present inequitable tax system be overhauled. If everyone paid according to his means and all loopholes were eliminated, taxes on smaller incomes would be relatively lower and simpler tax forms would probably be introduced.

Labor: The Auto Industry

A supplement to the technical report on page 32

In preparing the labor notes, CU seeks information from all interested sources. Letters are written to the manufacturer or distributor of each product to be listed, and to the union or unions active in the field. Where both AFL and CIO unions exist, both are asked for data.

THE AUTO industry is now engaged in the most gigantic task in its history: turning its vast resources to total war production. And directly involved in the effort are 350,000 or 400,000 workers who face unemployment while the necessary retooling is taking place.

That's the estimate of the research department of the United Automobile, Aircraft and Agricultural Implement Workers of America (CIO). Companies put the figure at 300,000. Just how long this period of unemployment will last no one can say definitely. The most optimistic estimates are that no substantial reemployment of displaced workers can take place before April and that the entire labor force of the auto industry won't be reemployed until October.

Auto workers place the blame for this situation on the shoulders of industry executives, especially those of General Motors and Chrysler. More than a year ago UAW-CIO officials presented a program (the Reuther plan) to the late OPM, which provided for gradual utilization and adaptation of available machinery and retraining of workers for airplane production. The union estimated that about 50% of the industry's tooling machinery was idle.

But OPM officials and industry heads (Mr. Knudsen constituted a handy liaison man) rejected the Reuther plan, said it was impossible to convert the auto industry effectively for war production.

Accordingly, the industry as a whole continued throughout 1941 making principally autos, doing a $4,350,000,000 business of which only $850,000,000 (less than 20%) was in armaments. Ford and a few independents like Studebaker and Hudson foresaw the inevitable cut in normal business and began to switch to defense production. As a result, these companies are now in better employment shape.

With U. S. entry into war the government ordered that auto production stop, that all effort go into production of war materials. This settled the question so far as auto executives were concerned, but left workers to bear the brunt of the government-industry "delay" policy.

The leading union in the auto industry is the United Automobile, Aircraft and Agricultural Implement Workers of America (CIO). This union has organized all the basic auto plants and the great majority of smaller and more widely distributed parts plants, and is now engaged in a far-reaching campaign to organize the aircraft industry. All makes of automobiles except the *Crosley* are now produced under contract with the UAW-CIO.

As spokesman for its 640,000 members, the UAW-CIO has presented proposals to industry and government officials aimed at protecting the economic status and morale of auto workers during the period of their unemployment. These proposals include:

(1) An increase in the amount of unemployment benefits and an extension of the period of payment. The Michigan Unemployment Compensation Commission, in charge of the act covering the great bulk of auto workers, is reported to favor the following changes which come "closer to labor's demands than ever before": increasing the *minimum* duration of benefit payments from 7 weeks to 16 weeks and increasing the *maximum* period from 18 weeks to 26 weeks; increasing the $7 *minimum* payment to $10, and the $16 *maximum* to $20; decreasing the two week waiting period to one week.

It is claimed that the Commission has a swollen treasury and can easily afford to pay adequate benefits.

(2) Establishment of a program for retraining automobile workers in arms-producing skills. The program is to be carried on by the Federal Government and a supplemental wage is to be paid to the trainees. This wage is to provide "at least an adequate standard of living" for workers.

(3) A moratorium on debts contracted by auto workers, so that automobiles, refrigerators, &c. will be protected from repossession.

Beyond this, the UAW-CIO demands that it be given a voice in the process of conversion. It advocates setting up an industry council (as proposed by CIO President Philip Murray) to be composed of an equal number of representatives of management and labor with a government official acting as chairman.

The council's functions would be to coordinate tooling and productive facilities to guarantee maximum utilization of equipment, to expand capacity where necessary, to place unemployed work-

ers and retrain new workers, to promote collective bargaining and ensure enforcement of labor laws such as the National Labor Relations Act, the Fair Labor Standards Act, and the Walsh-Healy Act.

A set-up not too close to this one is provided by the industry-labor advisory committee recently established to "assist in the development of" means to use automotive machines for war production. Its functions and its powers are extremely ambiguous. But it seems to be a step in the right direction.

In any case, as a reporter for the newspaper *PM* has pointed out, it's remarkable to see Edsel Ford, Walter Reuther and Richard Frankensteen sitting around a table discussing means by which workers and management can cooperate to produce weapons which will bring victory to the U. S. It's remarkable because just five years ago the same Reuther and Frankensteen were thoroughly beaten up by Ford "service men" for trying to organize Ford.

Auto workers have obviously come a long way in those five years.

Labor: The Radio Industry

A supplement to the technical report on page 41

TODAY, out of the 57,500 employees in the radio and phonograph industry, about 80% work in shops under contract with the United Electrical, Radio & Machine Workers of America (CIO). This is very different from the situation in 1936 when CU first reported on radio labor.

At that time, although approximately 50% of the radio workers were organized, only one of the big manufacturers, Philco, had a contract with a union. RCA, General Electric and Crosley were still fighting unionization.

Now RCA and General Electric are under contract with the UERMWA and Crosley has been organized by the International Brotherhood of Electrical Workers (AFL). Since Philco, RCA and General Electric together account for the large majority of radios made in this country, the UERMWA's contracts with these companies alone cover the bulk of workers in the radio industry.

A few important companies still do not have contracts with either union, however.

On the basis of information received from the UERMWA, the IBEW and the few manufacturers who replied to CU's requests for information, CU here presents some brief notes on the labor conditions under which the radio-phonographs rated in this issue are manufactured.

The following radios are made under contract with the UERMWA (CIO):

Philco One of the first important radio companies to be organized, Philco has had a contract with the UERMWA since 1933, except for a brief period in 1938.

In 1936 CU reported that wages paid by Philco were "probably the highest in the industry." Philco's present contract with the UERMWA reflects the effort of the union to maintain this standard. Minimum rate for men is 73¢ an hour ($29.20 for the basic 40 hour week) and for women, 60¢ ($24). At the time the contract was signed this was "the highest female minimum in the industry," according to the union.

In addition, the contract provides, for the 4,500 workers it covers, double pay for work on Sundays and holidays, an hourly night bonus of 5%, a guarantee of four hours work for employees reporting and full seniority rights. These latter two provisions have real significance for workers in an industry subject to seasonal employment variations.

General Electric The UERMWA's contract with General Electric is similar to that with Philco, except that a minimum of 50¢ ($20) for women and a 10% night bonus is in effect. General Electric has been under agreement to the UERMWA since 1937.

Magnavox Here the weekly minimum for men is $23; for women, $17.60.

Macy's (Espey) The Espey Mfg. Co.'s 40 employees are guaranteed a $21 weekly minimum.

The following radio is made under contract with the IBEW (AFL):

Pilot Once anti-union, Pilot now has an agreement with the IBEW covering about 175 employees. The agreement provides for a $23.20 weekly minimum for men; $22.40, for women.

The following radios are not made under contract with either the UERMWA or the IBEW:

Stromberg-Carlson Back in 1937 CU reported that members of the UERMWA were conducting "an uphill fight against a company union" in the Rochester plant of Stromberg-Carlson. Now, in 1942, Stromberg-Carlson has a contract with an independent union which was certified by the NLRB as bargaining agent for Stromberg-Carlson employees. The UERMWA declares that this is still a company union, however, and maintains "a functioning local" in the plant.

According to information received from the company, a weekly $24 minimum for men and a $16.80 minimum for women are in effect.

Philharmonic The company informs CU that "as far as we know, none of our employees belong to a union" but "we would have no objections if they did." Philharmonic maintains a weekly minimum of $22.

Freed-Eisemann and ***Lafayette Concerto*** Both are made by the Freed Radio Corp., which is an open shop, according to the UERMWA.

CU received no information on ***Zenith*** or ***Scott*** radios from either the unions or the companies.

AUTOMATIC RECORD CHANGERS

INFORMATION received by CU indicates that four of the eight makes of automatic record changers rated in this issue are union-made. The ***RCA*** and ***Philco*** changers are manufactured under contract with the United Electrical, Radio & Machine Workers of America (CIO); the ***General Instruments*** changer, under contract with the International Brotherhood of Electrical Workers (AFL). The Garrard Sales Corp. informs CU that the English plant, where all ***Garrard*** changers are made, is "fully unionized."

Cumulative Index

Each issue of the Reports contains this cumulative index of principal material carried since publication of the 1942 Buying Guide issue. By supplementing the Buying Guide index with this one, members can instantly locate current material and keep abreast of changes resulting from new tests. Page numbers run consecutively beginning with the January 1942 issue. Jan. 1—28; Feb. 29—56.

Reports starred replace material in the 1942 Buying Guide.

The Docket

Notes on government actions against misleading advertising, false claims, dangerous products

The Federal Trade Commission has taken action against:

National Bakers Service, Inc., distributors of *Hollywood Mix*, and the **Wm. Freihofer Baking Co.**, makers of *Freihofer's Hollywood Health Bread*. *Hollywood Mix* is sold to bakers, such as Freihofer's, to be used as an ingredient of a special "health" bread. The Commission found that false and misleading statements were being made in advertisements for the mix and bread; and now the companies involved have agreed to stop making such misrepresentations. Some of the prohibited claims: that the mix and the bread made from it contain no fats or sugar and therefore the bread is not fattening; that its use will keep people slim and well; that the mix and bread have been endorsed by leading physicians and dietitians for reducing diets; that bread made from *Hollywood Mix* is generally used as a diet by Hollywood actresses.

The Food & Drug Administration has seized:

4 Way Cold Tablets. In this, one of the FDA's largest drug seizures to date, 19,440 boxes were taken. Cause for the seizure: the quantities of drugs which the labels stated the product contained were not sufficient to produce the results claimed. That constitutes misbranding, punishable by seizure under the terms of the Food, Drug & Cosmetic Act.

Specifically, charged the FDA, the product was misbranded in that the quinine content would not help reduce fever associated with colds; the magnesium hydroxide would not relieve "miserable" cold symptoms by helping to neutralize upsetting stomach acidity; the phenolphthalein would not relieve symptoms by helping elimination. But the labels on *4 Way Cold Tablets* claimed all these effects.

The FDA also objected to the label statement that the product would stop a cold "if taken at the very first feeling that a cold is coming on." On the contrary, said the FDA, the ingredients of *4 Way Cold Tablets* singly or in combination do not constitute an adequate cold remedy. As CU has often pointed out, the same can be said of all proprietary cold cures.

FDA REPORT

The Food & Drug Administration was kept busy throughout 1941. As the agency charged with the enforcement of the Federal Food, Drug & Cosmetic Act, the FDA worked diligently to eliminate filthy food from the market, to prosecute manufacturers and shippers responsible for the contaminated shipments, to carry on educational work directed towards improving sanitary practices of factories.

The extent of the FDA's efforts is shown in the recently issued report of W. G. Campbell, Commissioner of Food and Drugs. During the past year the FDA examined 47,147 samples of food, drugs and cosmetics; instituted 1,155 prosecutions; made 2,016 seizures; denied entry into the U. S. to 2,605 consignments from foreign countries.

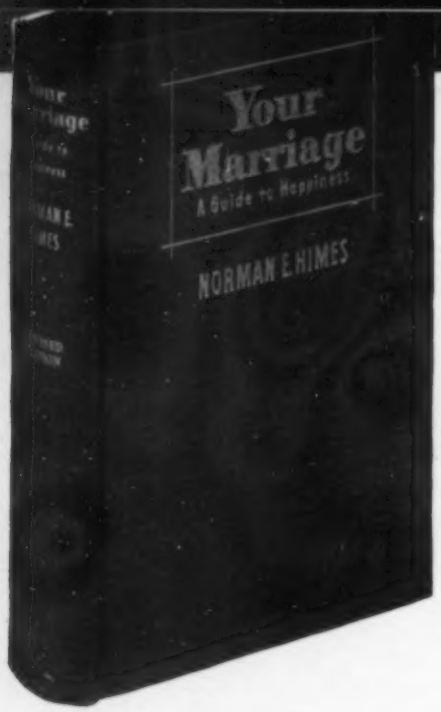
More than 1,000 shipments of foods were seized because of filth or decomposition. The seizures included shipments of grapefruit juice made from partially rotten fruit, raw coffee filthy from dock sweepings, coffee substitutes infested with insects, flour and corn meal containing weevils, bakery products made under insanitary conditions, butter made from unfit cream, cheese infested with insects, decomposed eggs, fish, poultry and tomato products.

The FDA was also active in the field of drugs. It moved against misbranded cold and headache preparations containing acetanilid or acetophenetidin, when directions for use might lead to consumption of dangerous amounts of these ingredients. It seized remedies for chronic alcoholism containing emetine; inhalants containing an excessive amount of epinephrine; reducing preparations with harmful quantities of thyroid extract.

Outstanding among the FDA's drug cases was the nationwide investigation to discover the whereabouts of thousands of sulfathiazole tablets contaminated with phenobarbital (see CU *Reports* for April 1941). Before the tablets could be found and removed from the market, Federal and cooperating State and city officials made over 37,000 visits to distributors, doctors and druggists.

An increased number of court actions were brought by the FDA against misbranded proprietary medicines. Responsible for most of these actions were false and misleading therapeutic claims and inadequate warning statements. Regulatory action was continued on vitamin products deficient in vitamin potency; on dangerous therapeutic devices; on harmful, misbranded and deceptively packaged cosmetics.

The FDA has apparently made good use of the funds at its disposal: what its report shows is that to attain maximum effectiveness it needs much larger funds.



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Following are some of the subjects covered:

A Note About the Author

DR. NORMAN E. HIMES was born in Jersey City, N. J., on August 4, 1899. He was educated at Harvard University, to which he remained faithful, taking his B.S. there in 1923, his M.A. in 1924 and his Ph.D. in 1932. He is now Professor of Sociology at Colgate University.

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